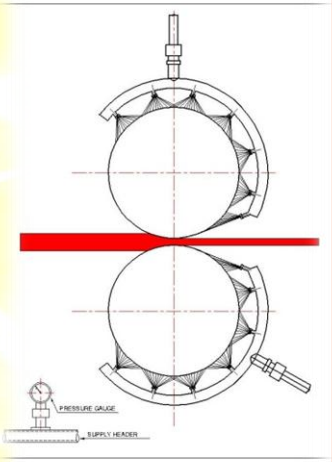
Standard operating procedures for madhav alloys pvt ltd

A Presentation by

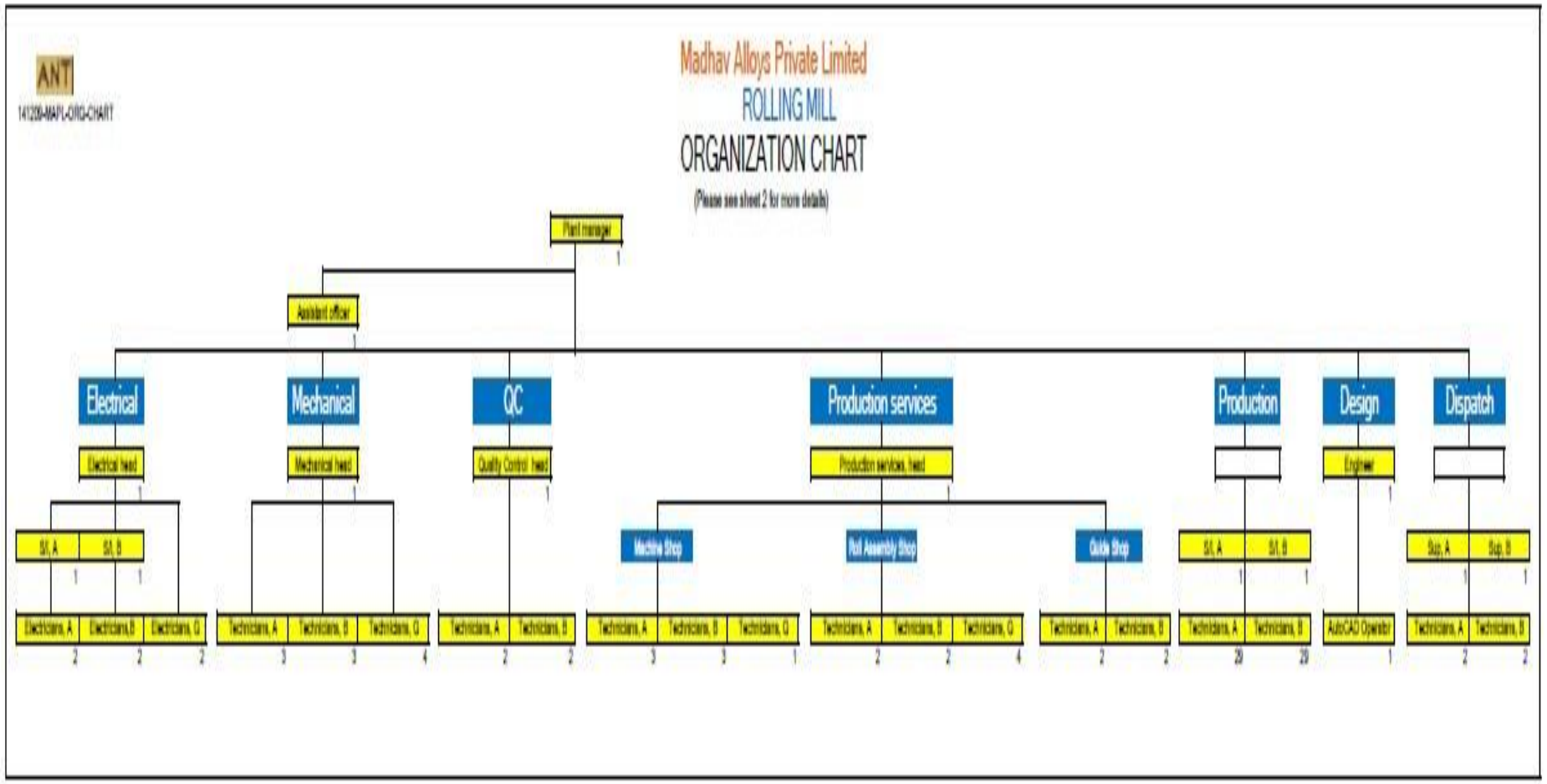
ANT **A N T STEEL ENGINEERS (ASIA) PVT. LTD. PUNE**



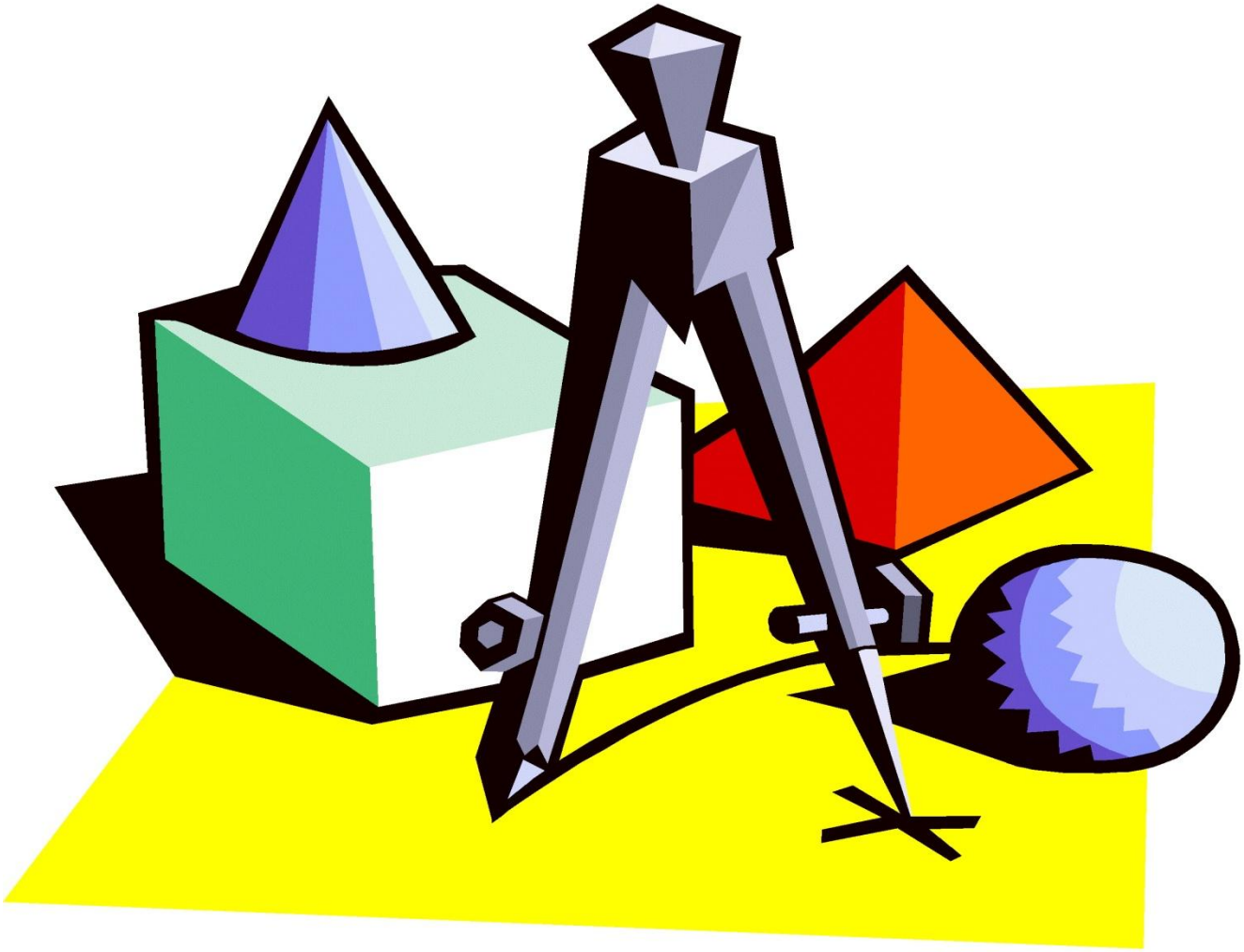
For

Madhav Alloys Private Limited

1.1
ORGANIZATION CHART



1.D. DRAWINGS



1.D.1.
INSTRUCTION MANUALS

1.D.2.
ROLL PASS DESIGN FOR SLIT ROLLING

2.1
ROLLING PROGRAM

Rolling Program for the month of June 2015			
Date	Size	Apprx tonnage	Remarks
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
Total			

2.1.
Meeting on Rolling program

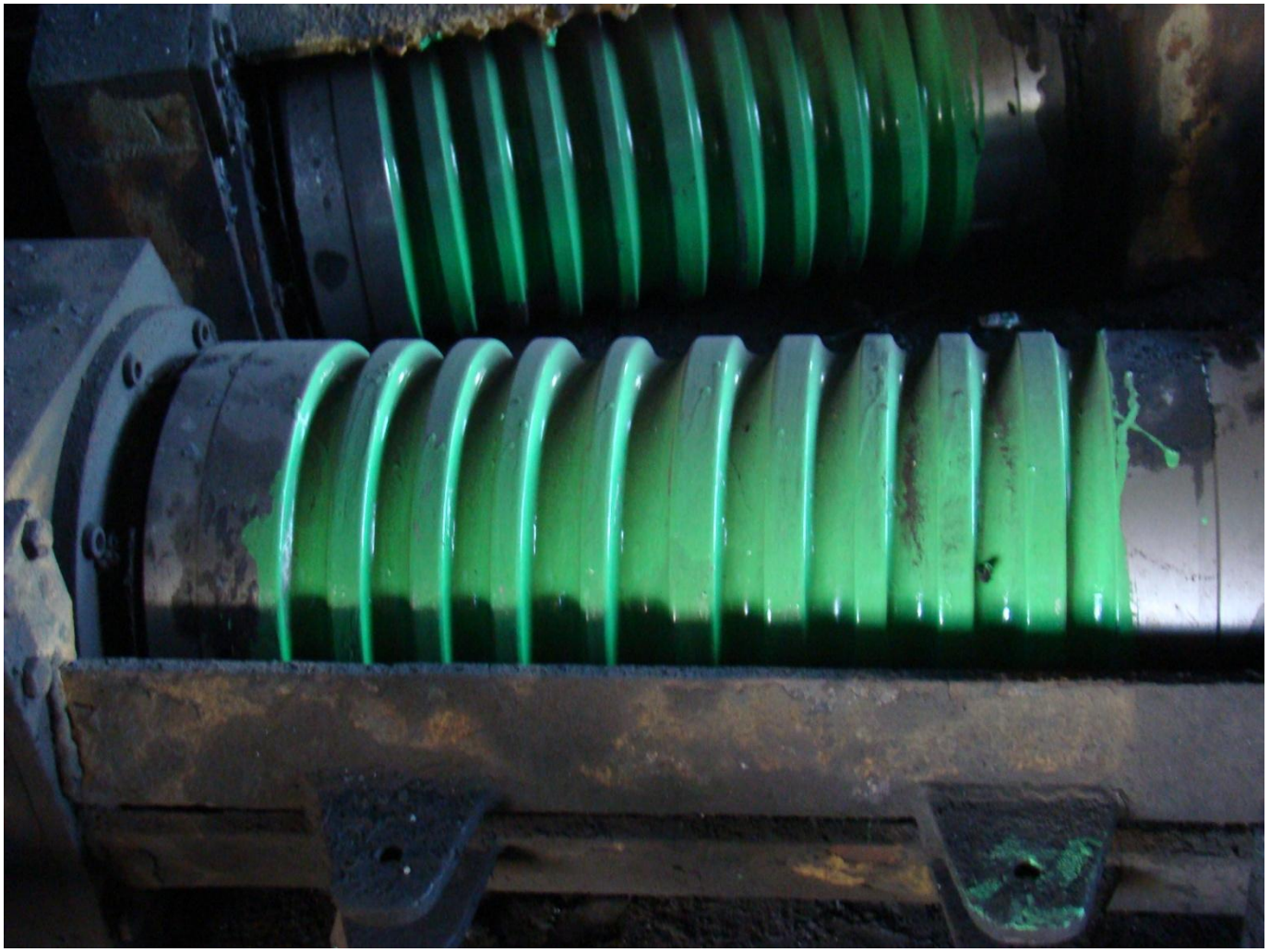
3.1
ROLL INVENTORY

3.2
ROLL INVENTORY

3.2.D.
ROLL BARREL HARDNESS CHECKING

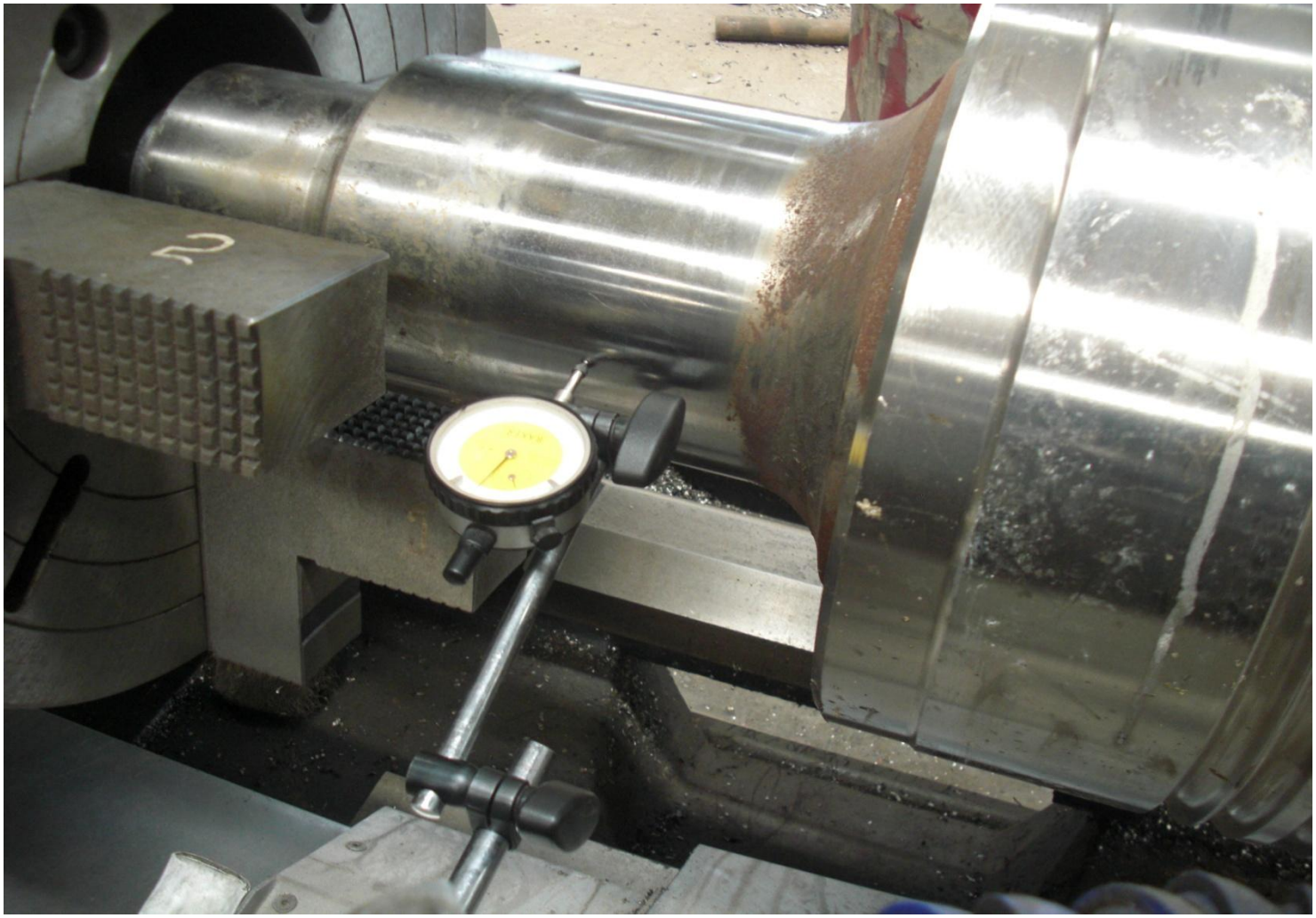
3.2.I
BAD PASSES PAINTED RED

3.2.I
GOOD PASSES PAINTED GREEN

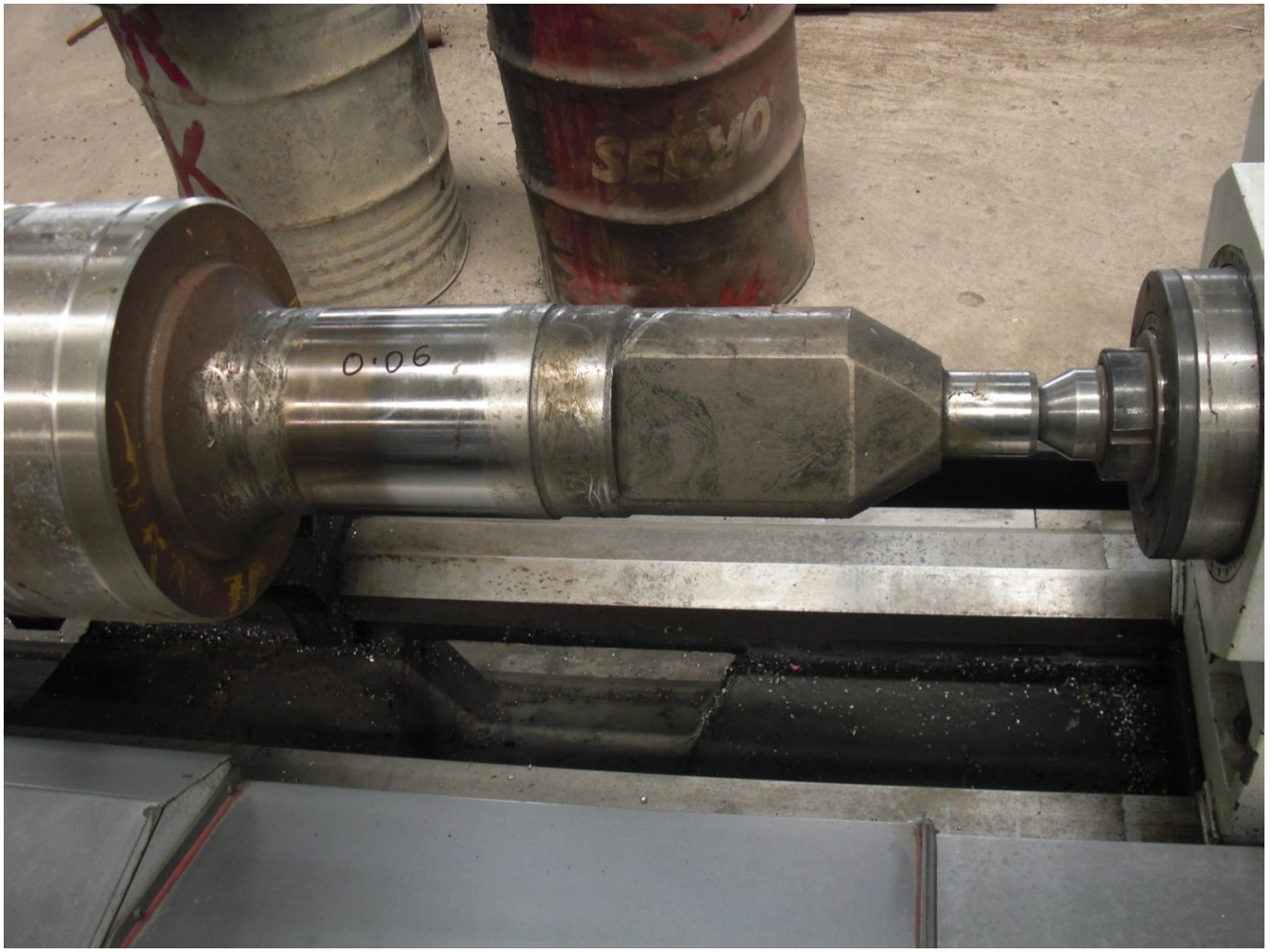


3.2.J
SET OF TEMPLATES

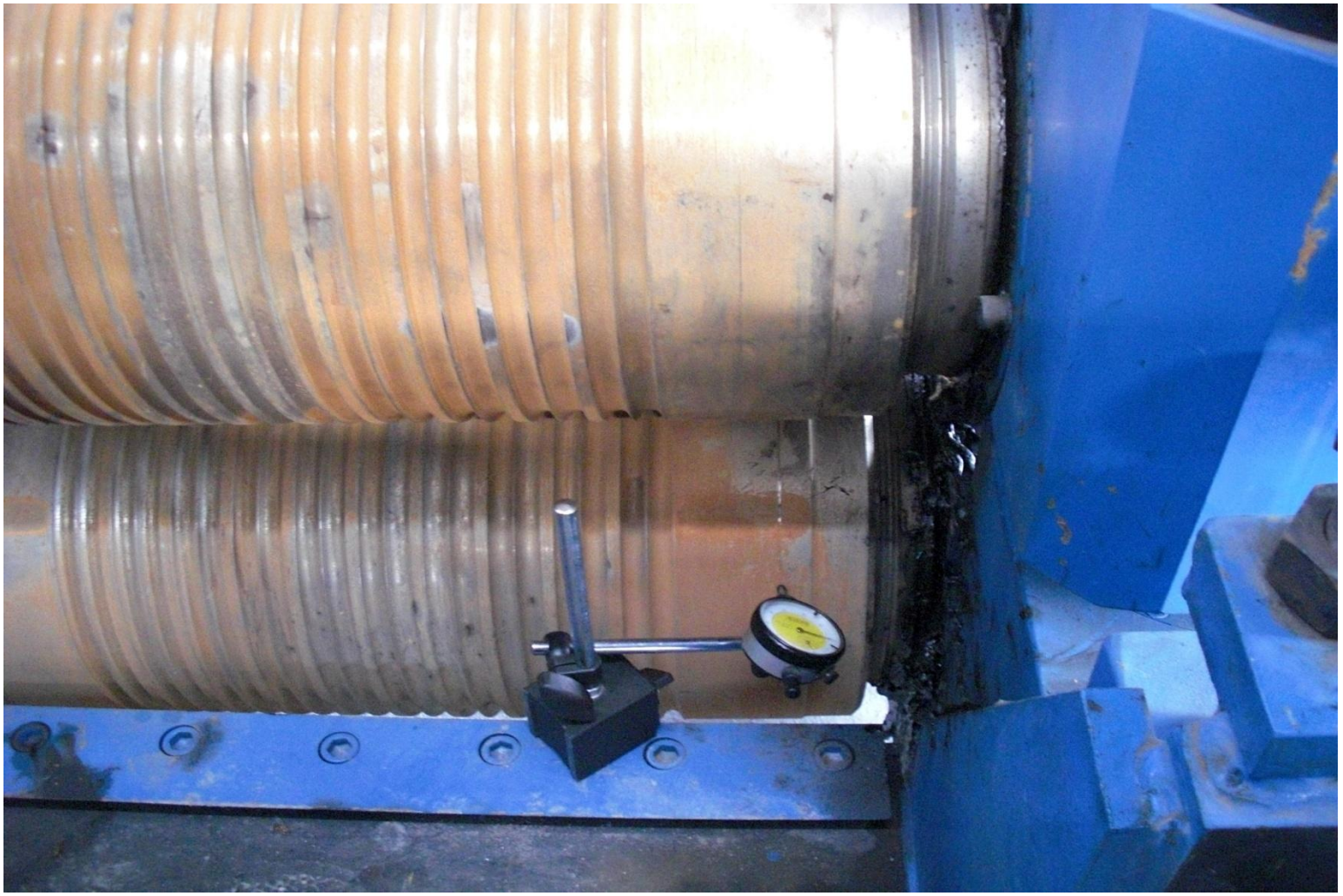
3.2.L.
ROLL NECK ECCENTRICITY CHECK



3.2.L.
TAIL STOCK SIDE ECCENTRICITY



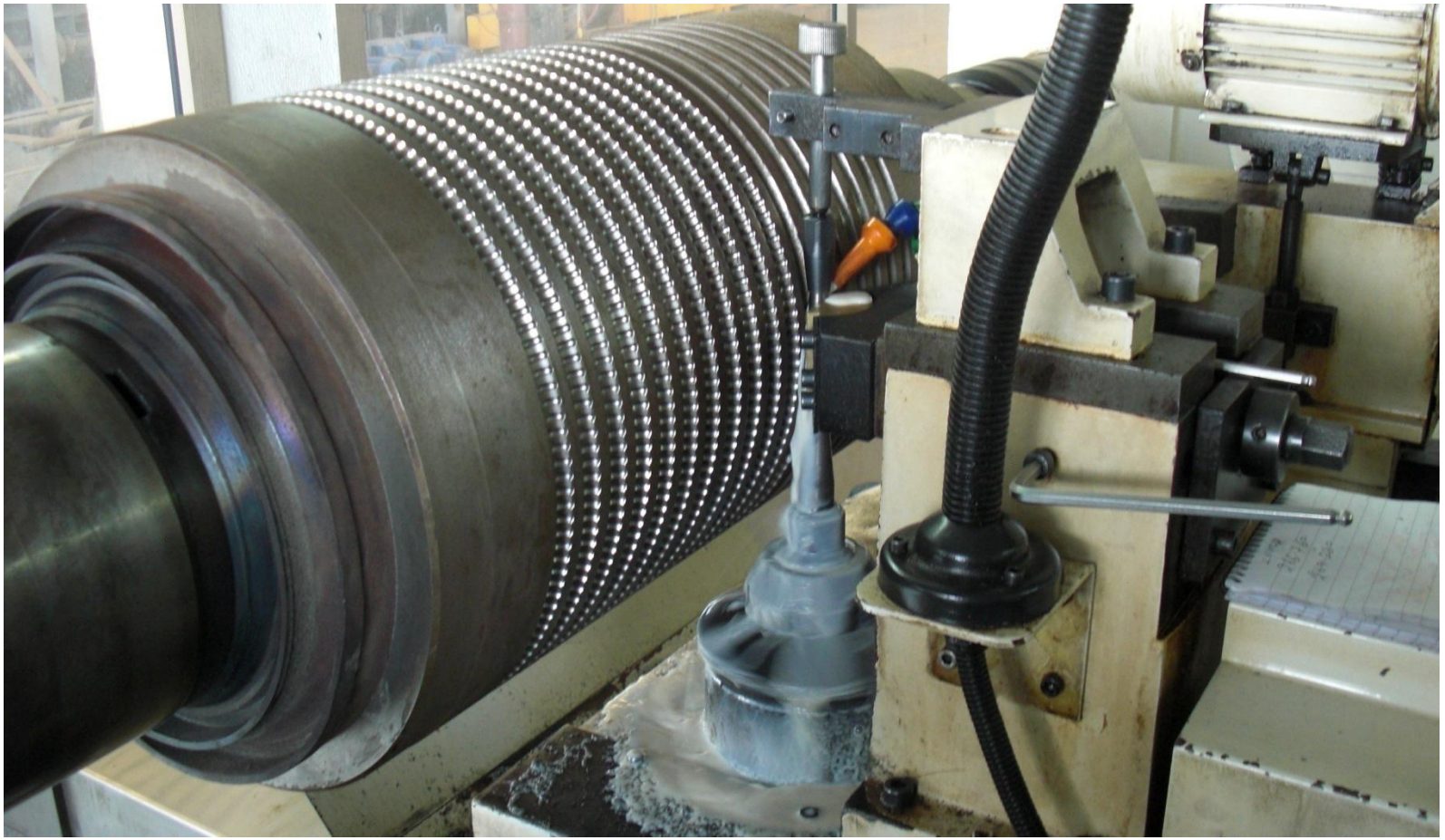
3.2.M
ROLL ECCENTRICITY AFTER ASSEMBLY



3.2.N
CNC MACHINE FOR ROLL TURNING

3.2.N.
CNC MACHINE FOR RIB CUTTING

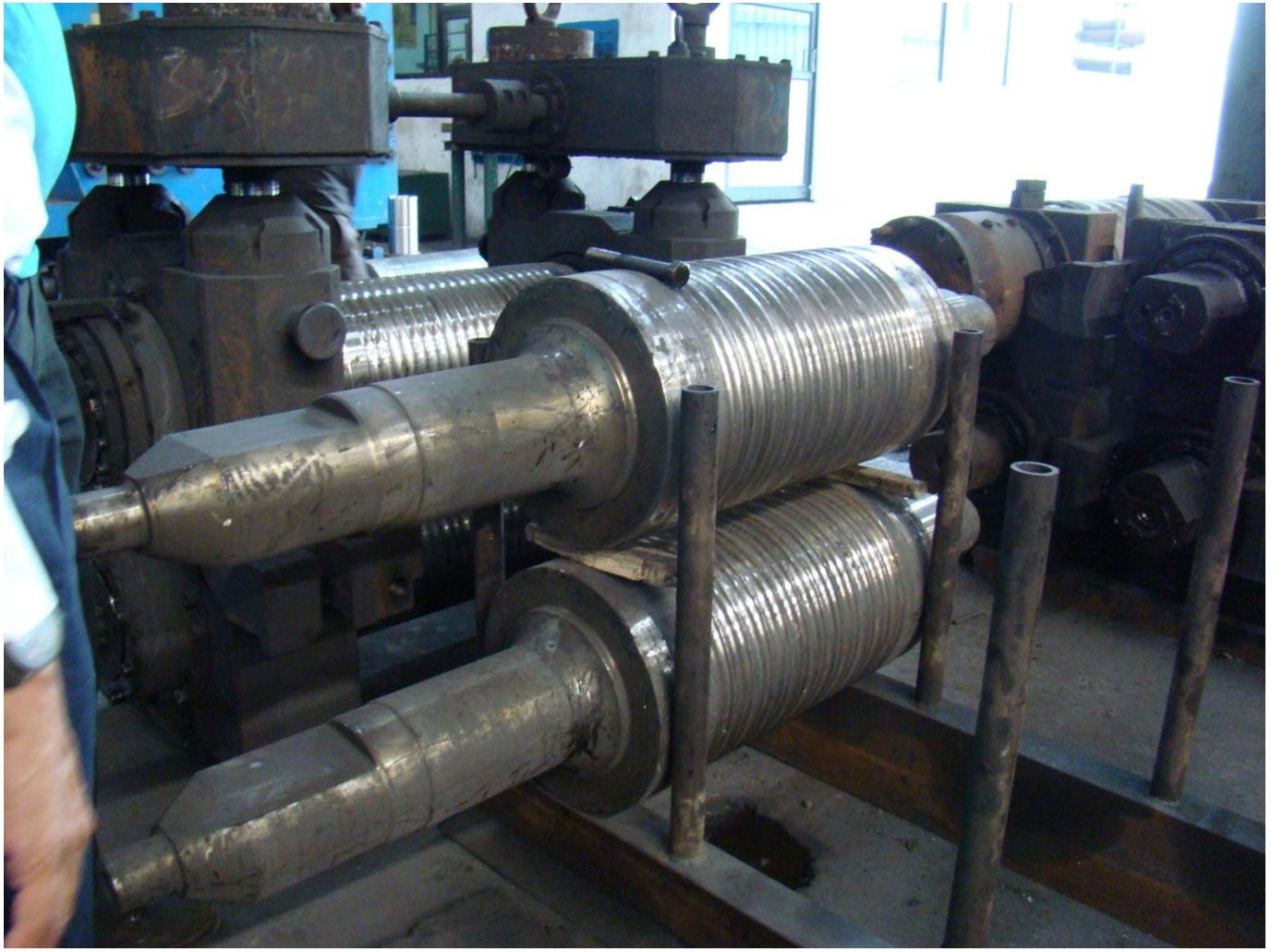
3.2.N.
CNC MACHINE FOR RIB CUTTING



3.2.O.
ROLL STORAGE

3.2.0
Roll Storage

3.2
Roll Storage

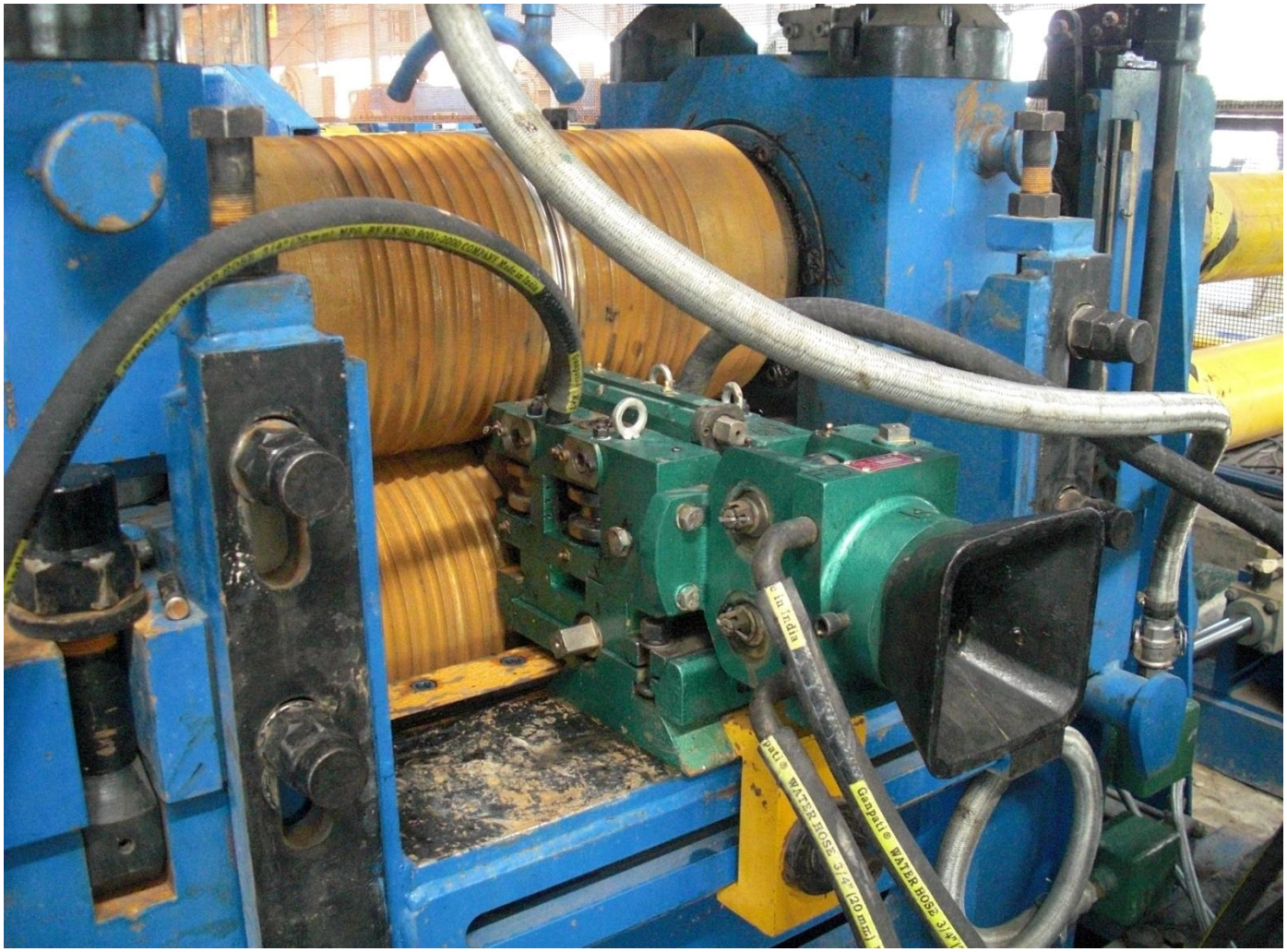


3.2
ROLL STORAGE

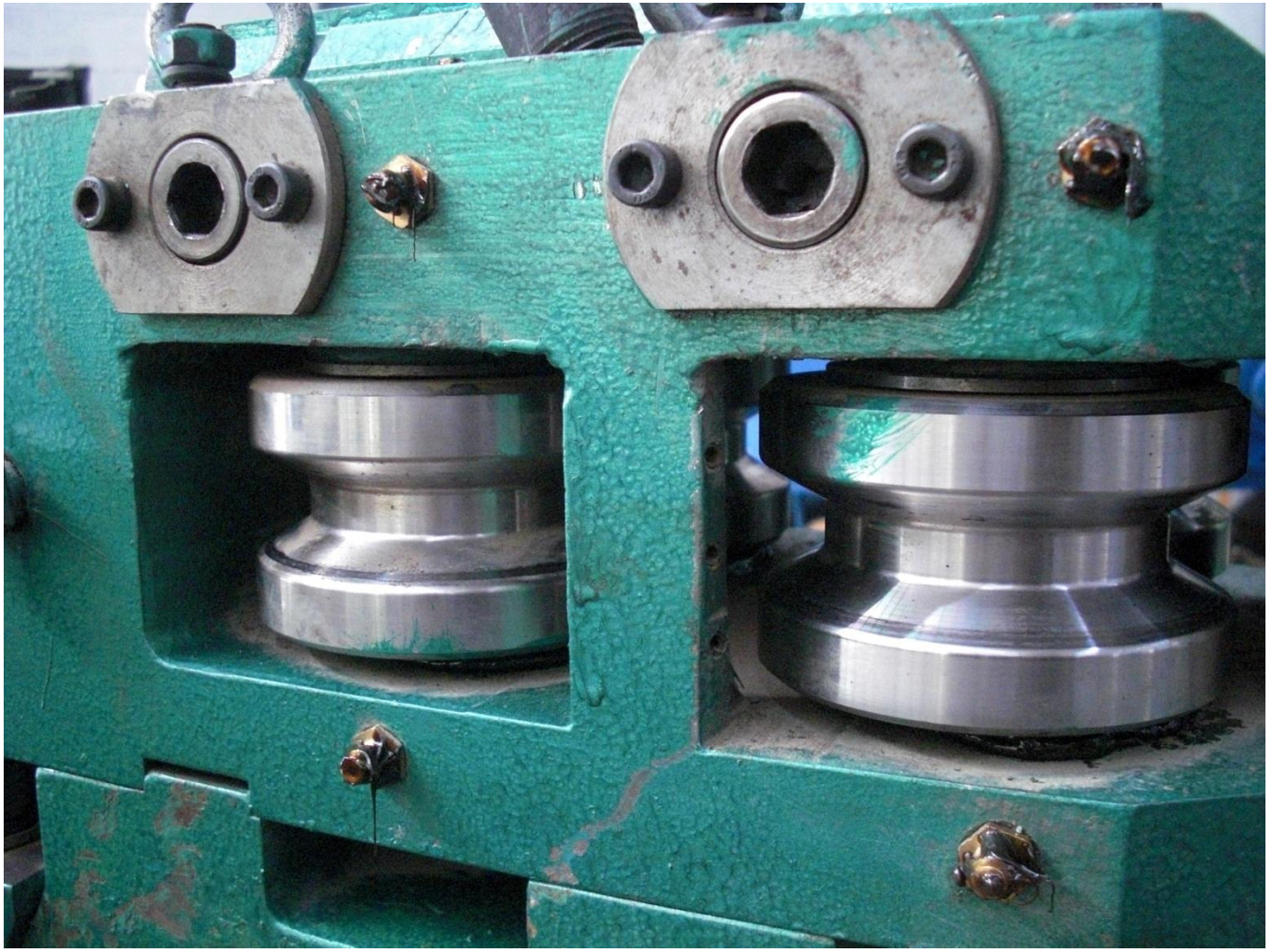
4.2
Guide Box Shop

4.3.
GUIDE BOX LEVEL

4.5
FOUR ROLLER ENTRY BOX



4.5
FOUR ROLLER ENTRY BOX

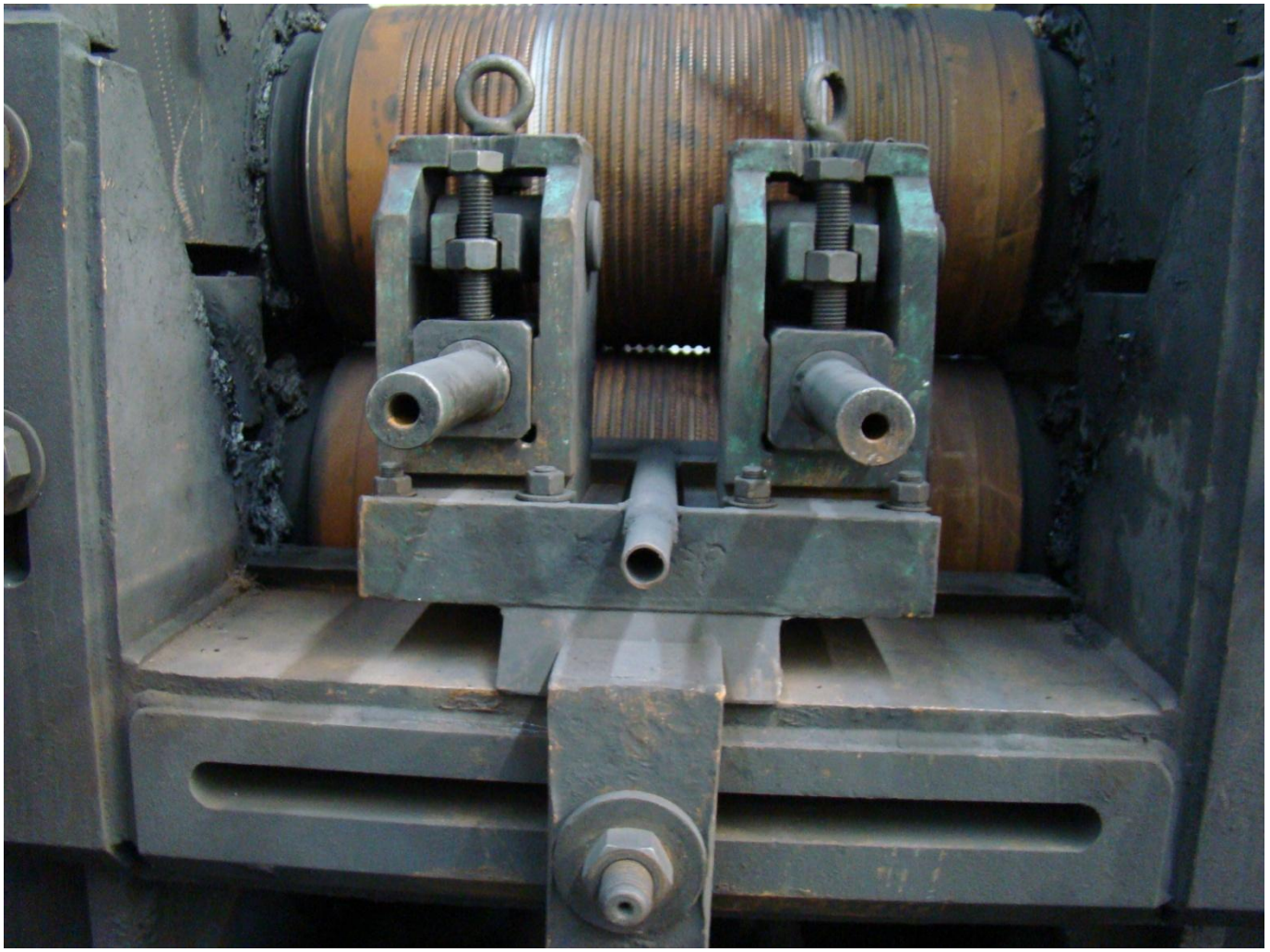


Profile of entry guide need check

4.5
FRICTION ENTRY BOX

4.6
FINISHING ENTRY BOX SLIT ROLLING

Finishing delivery Pipe



4.10
TEST BAR SAMPLE FOR GUIDE CUTTING

4.11
Remove sharp edges

4.11 SHAVINGS

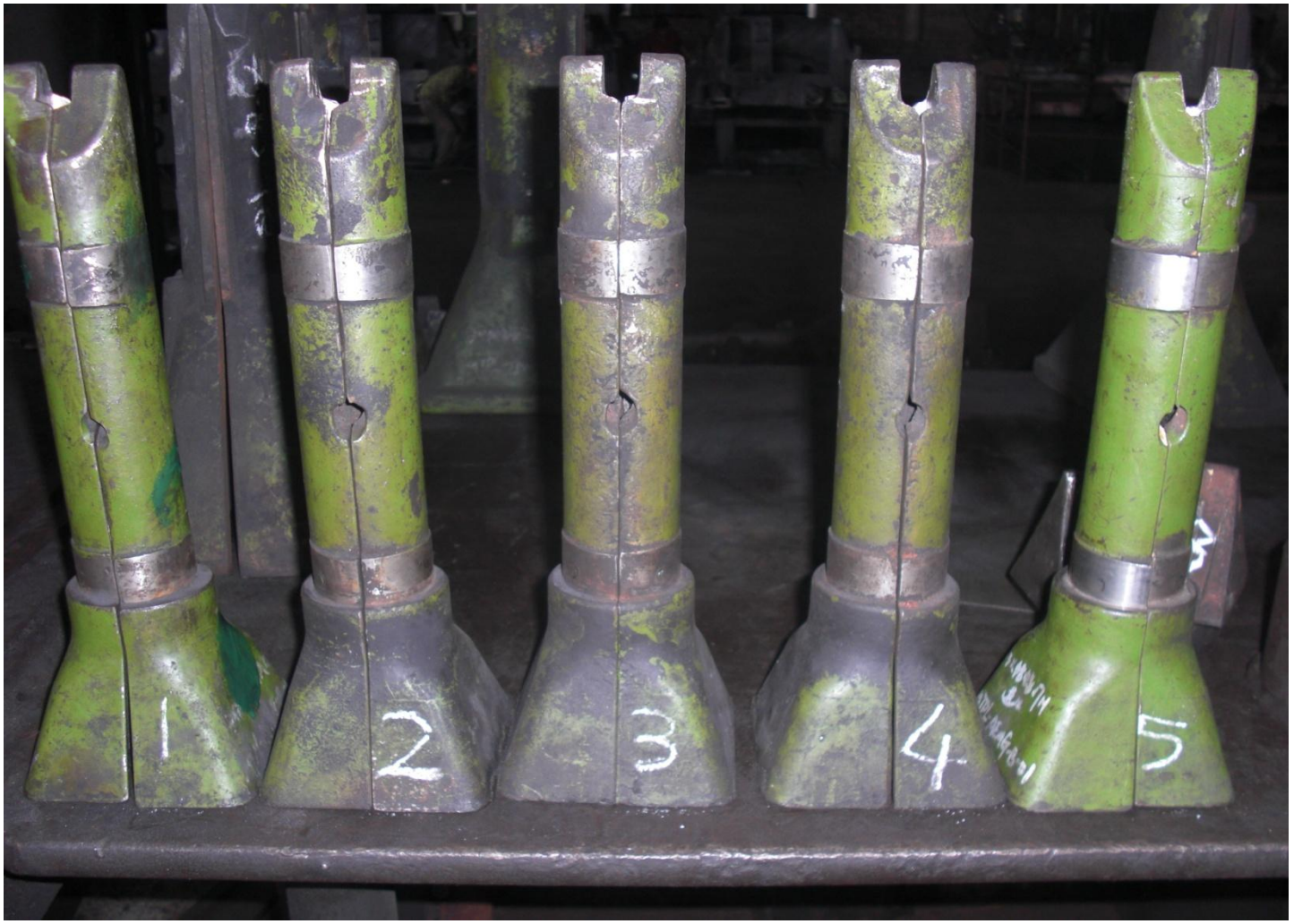
4.11
Grinding delivery nozzles

4.13.
TEMPALTE FOR PROFILE OF SLITTER ROLLER

4.17
NEW BEARINGS FOR CRITICAL LOCATIONS

4.18
SUFFIENT SPARES FOR SLITTER ROLLER

4.18
SFFICIENT SPARES

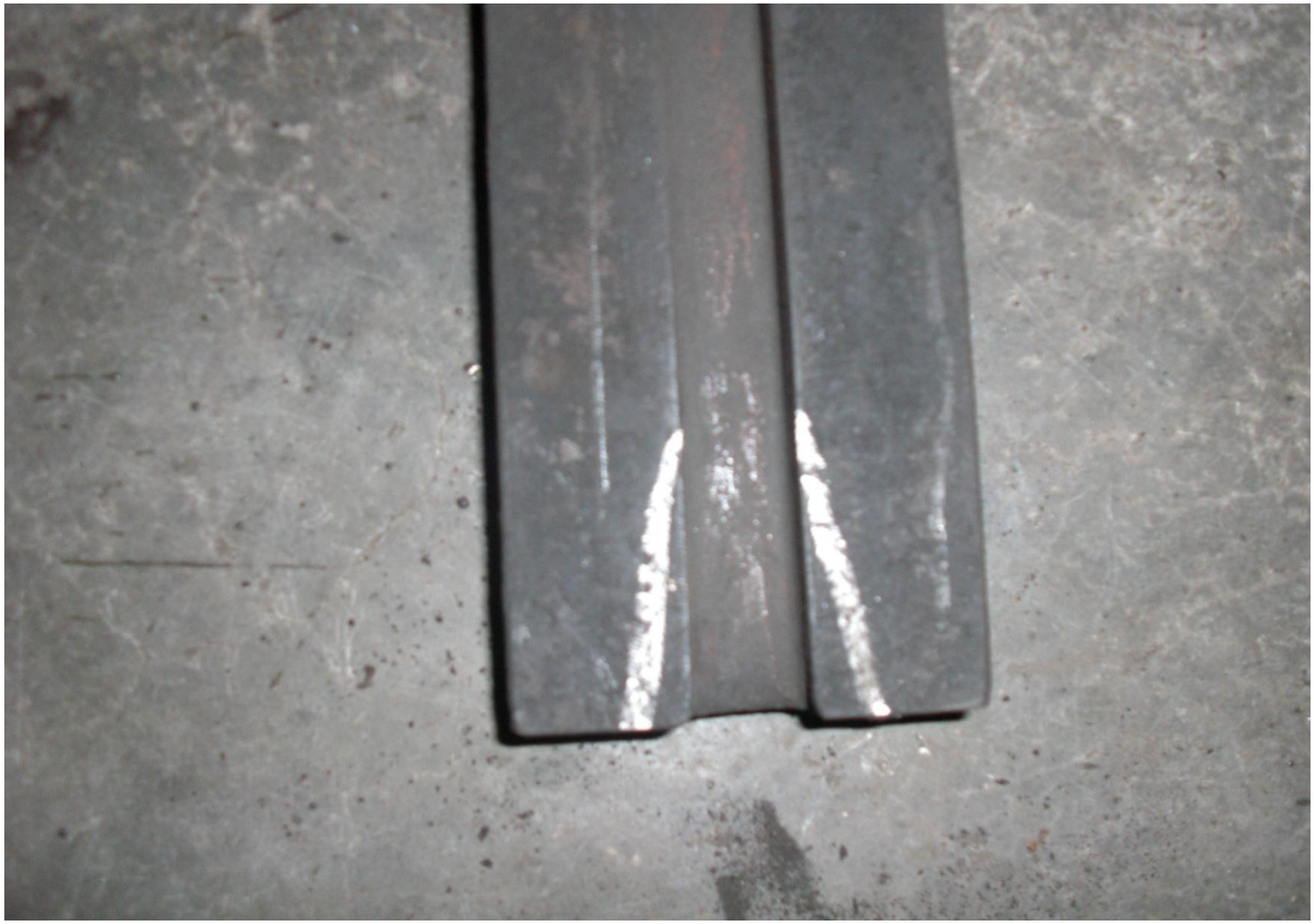


4.18
VERIFICATION OF SPARES

4.19.
ENTRY GUIDE BOX VERIFICATION

4.20.
DELIVERY GUIDES CHAMFERED

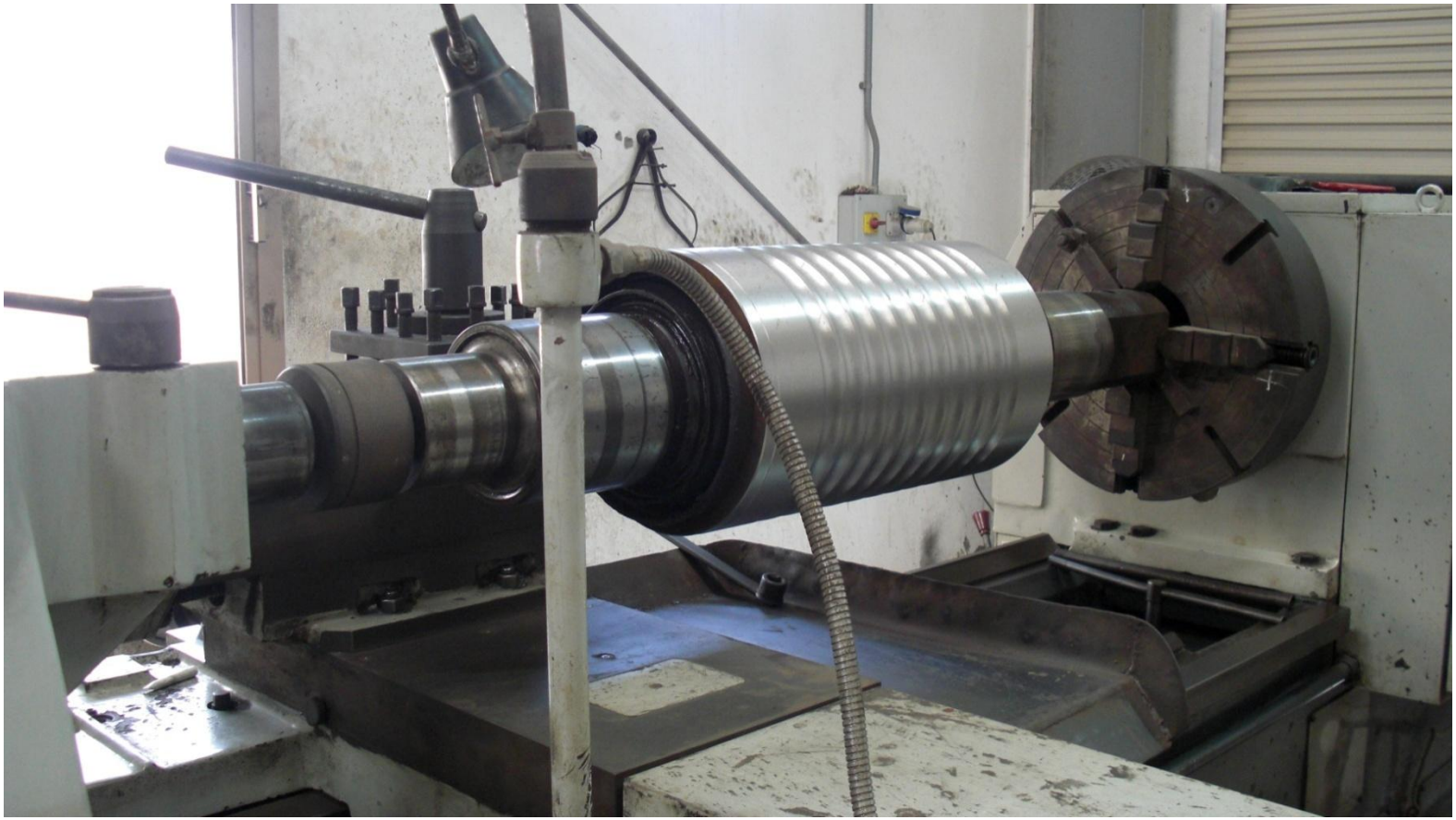
4.20
DELIVERY GUIDES



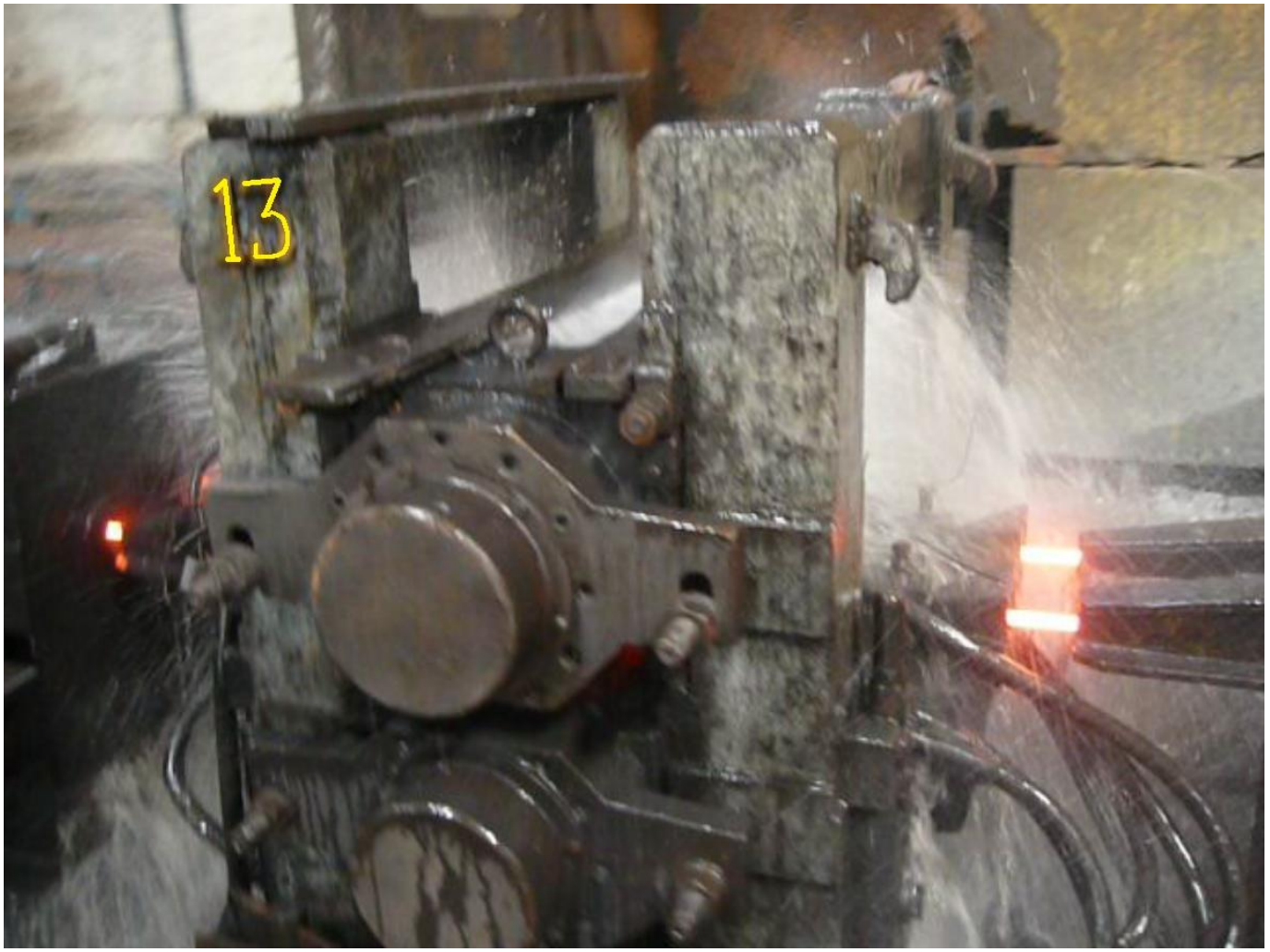
5.1
CLEANING BOOTH FOR MILL STANDS

5.3
INNER RACE (SLEEVE) FOR HOUSINGLESS STANDS

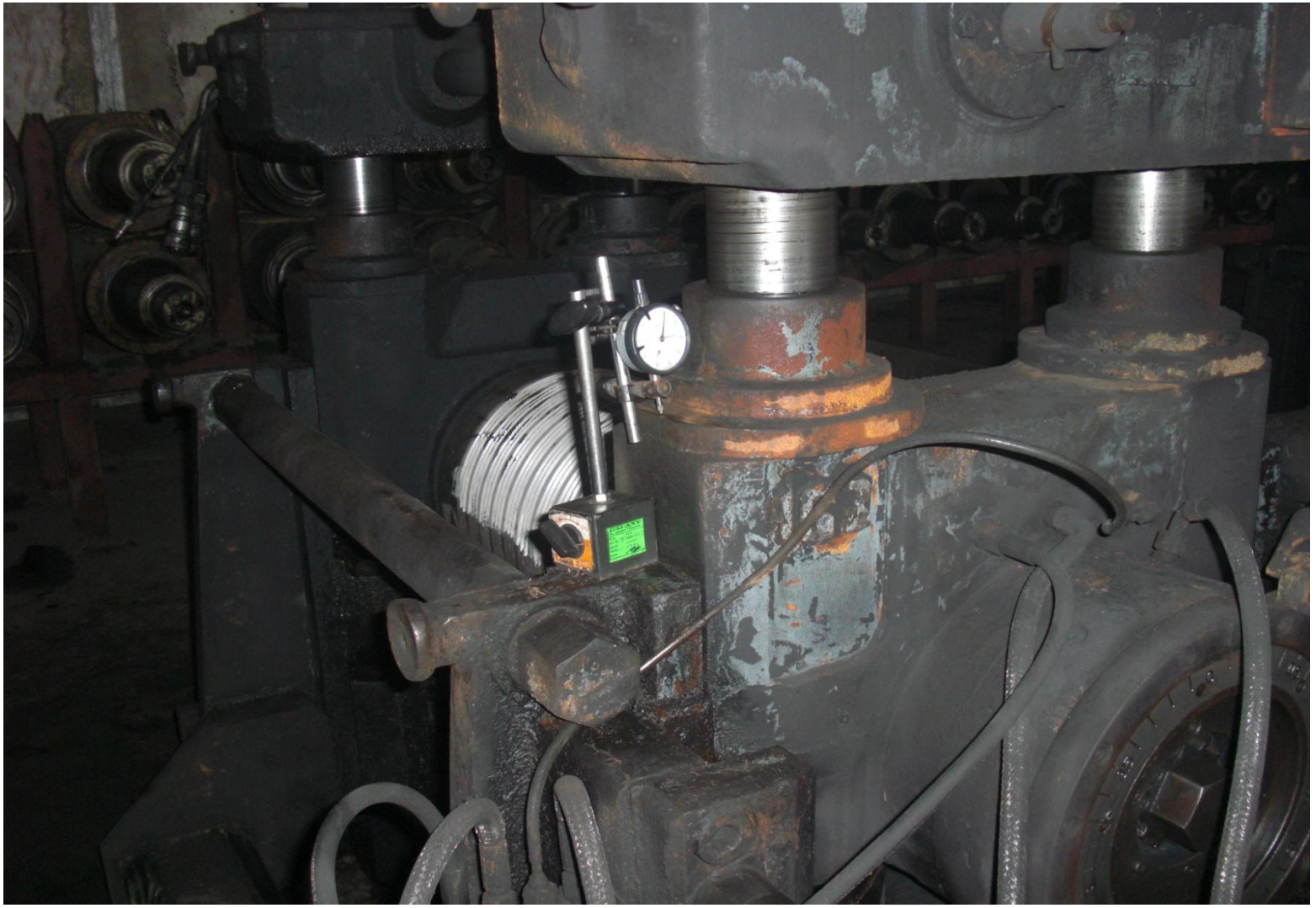
5.3
PERMANENT MOUNTINGS OF SLEEVES ON ROLL NECK



5.4
IDENTIFICATION OF HOUSINGS



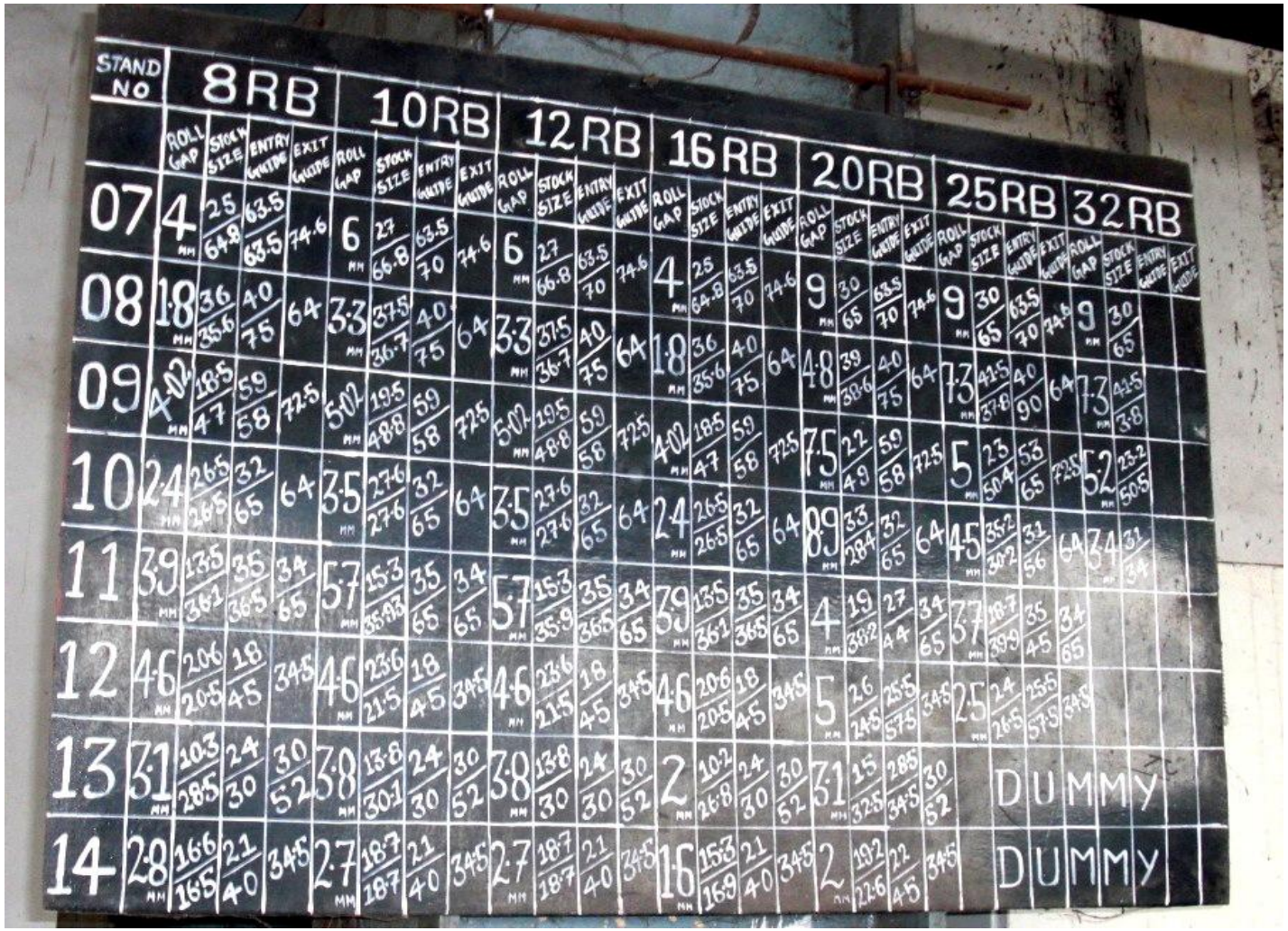
5.6
ROLL JUMPS



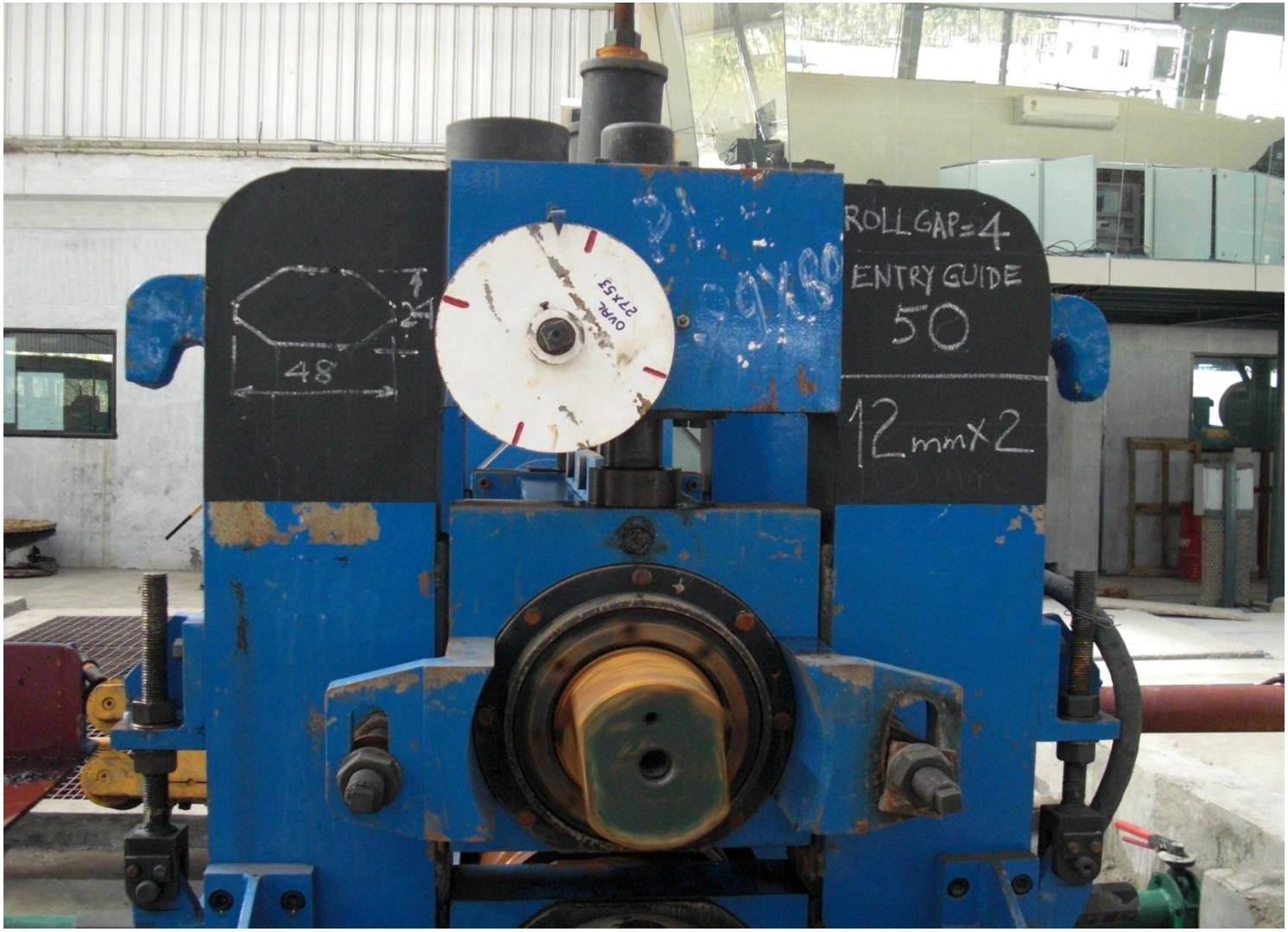
5.10
AXIAL PLAY

5.10
AXIAL PLAY CHECK

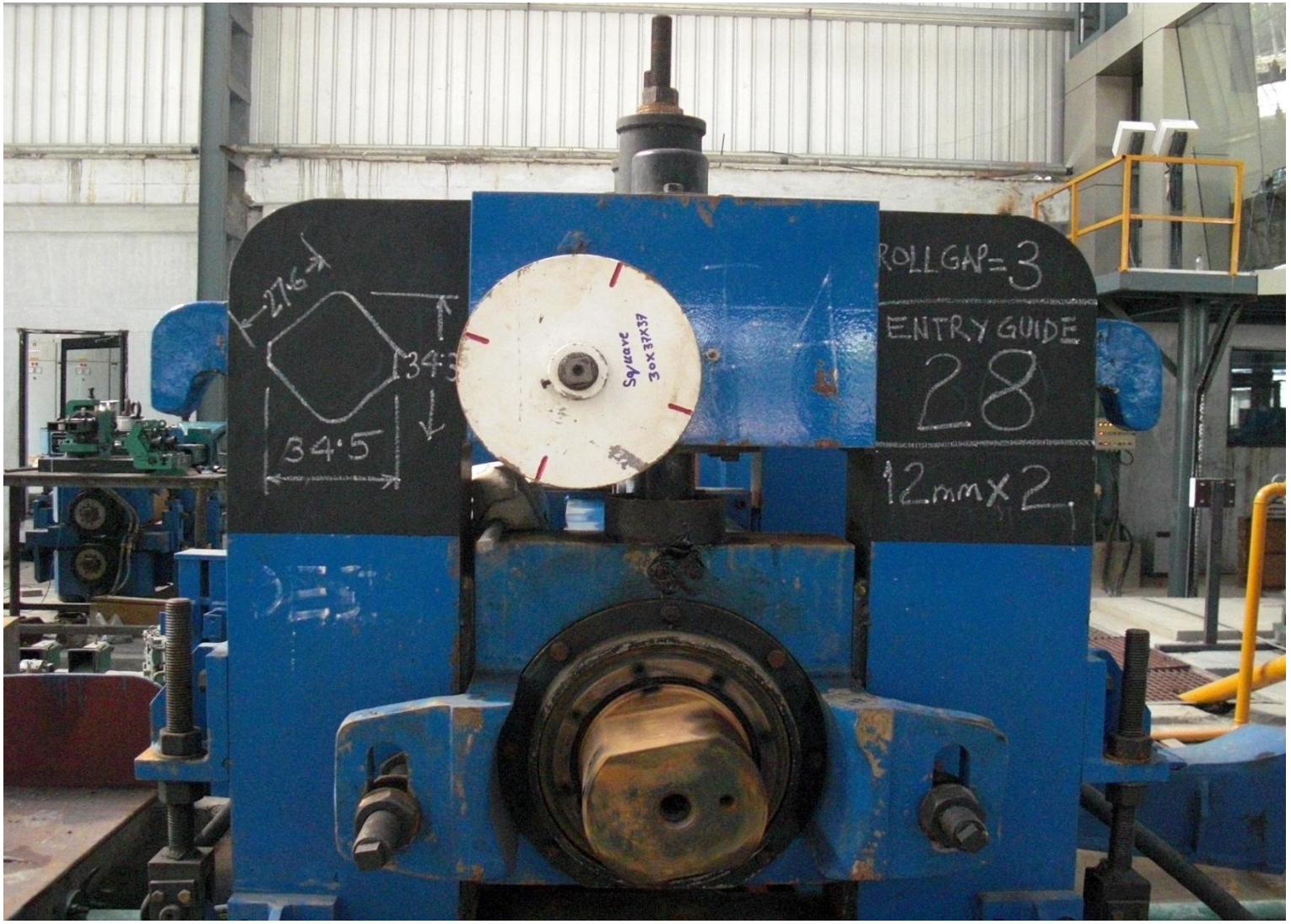
6.8
ROOLING STANDARDS



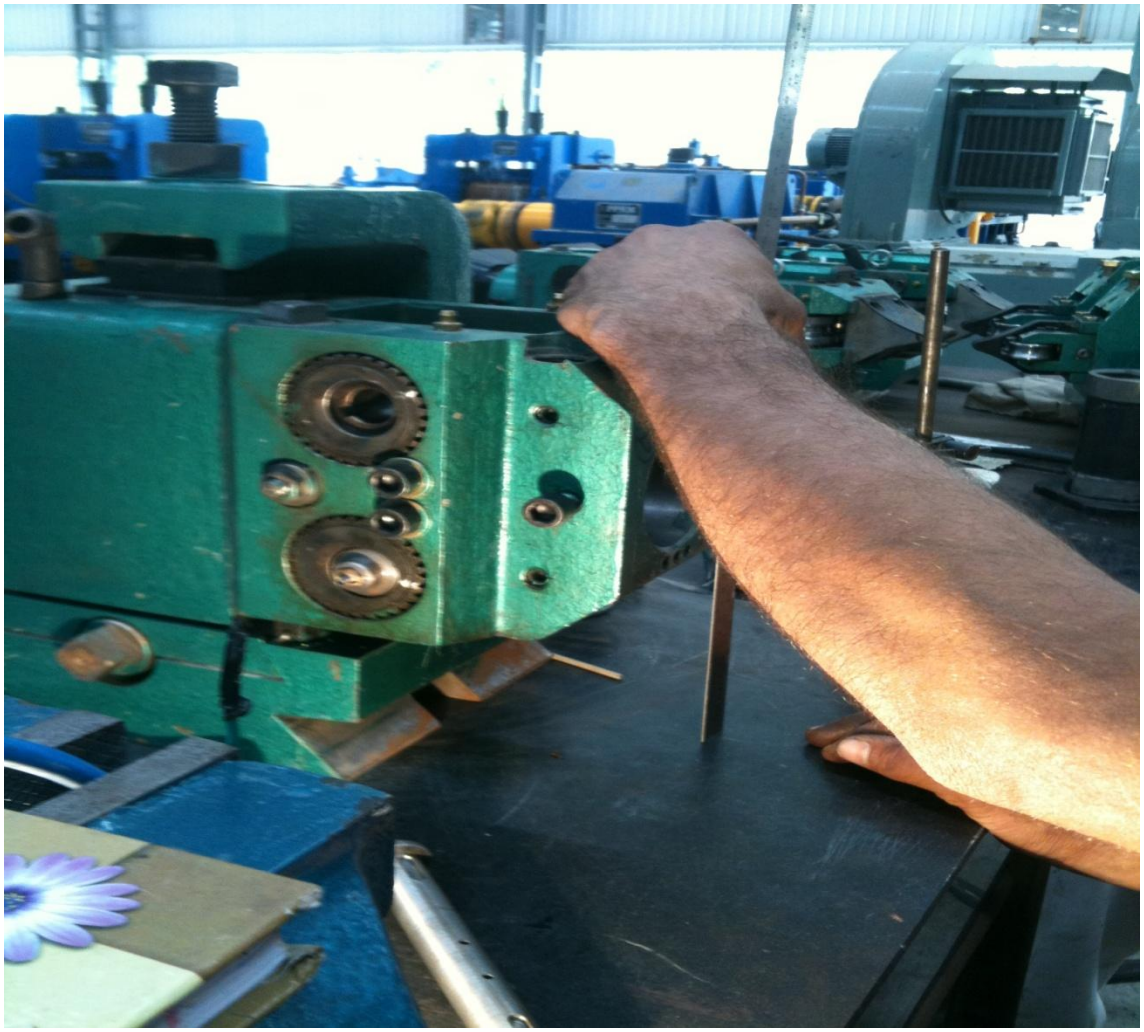
6.8
BLACK BOARD ON THE STAND



6.8
BLACK BOARD ON THE STAND



6.9
ENTRY GUIDE BOX VERIFICATION



7.1
ROLLING STANDARDS

Date 3rd June 2013

Rolling Standard issued for rolling on 4th June 2013

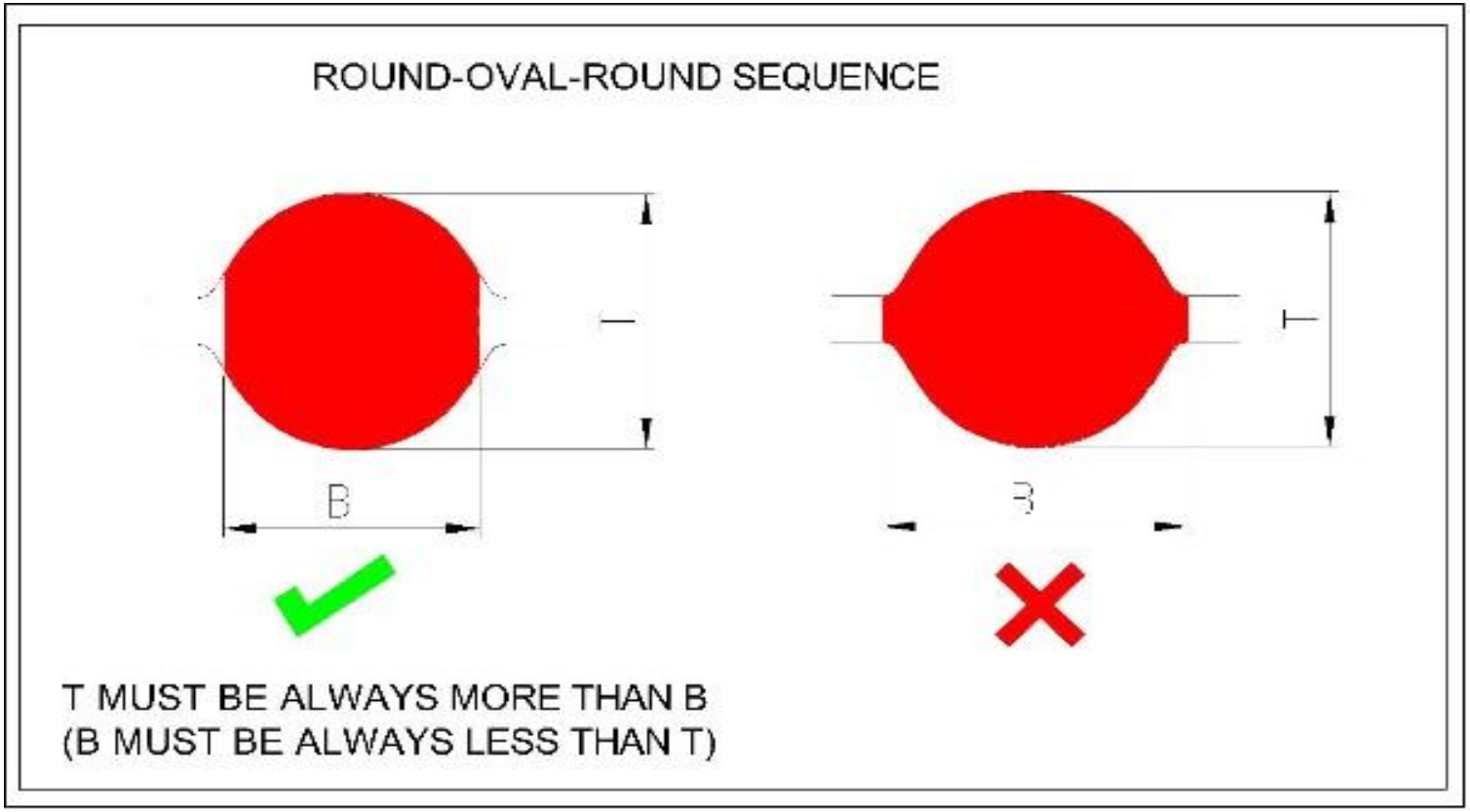
8 mm X 3

Std No	Type of pass	Cold size	Groove depth	Pass Width	Hot size Top to bottom 4.9	Guide box Set Bar thickness for next pass	Guide box Set Bar width for next pass	Roll gap by checking pass by inside caliper (top to bottom)	New pass roll gap Absolute	Roll jump assumed	New pass roll gap (feeler/Caliper)	New pass roll gap (Binding wire)	entry guide opening
Note: Red colour indicate correction is required.											mm	mm	mm
Billet	Nil	125 square			126.50								
1	Box	86 thick	37.5	146.8	87.03			87.50	12.03	0.50	11.5		134.00
2	Box square	97 thick	44	111.2	98.16			97.50	10.16	0.50	9.7		95.0
3	Oval	65 thick	30.75	167.9	65.78			65.50	4.28	0.50	3.8		115.0
4	Round	78 x 78 round	35	86.6	78.94			80.00	8.94	0.50	8.4		80.0
5	Oval	45.5 thick	19.5	108	46.05	46.10	89.50	46.00	7.05	0.50	6.5		101.0
6	Round	56.5 X 56.5 Round	24.5	60.6	57.18			57.00	8.18	0.50	7.7		52.0
7	Oval	28.5 thick	11.25	76.6	28.81	28.90	58.70	30.00	6.31	0.50	5.8		71.0
8	Round	39 x 39 round	17	42.1	39.43			42.00	5.43	0.50	4.9		44.0
9	Oval	21 thick	9	56.57	21.23	21.20	47.50	22.50	3.23	0.50	2.7		51.0
10	Round	29 x 29 round	13	31.7	29.32			31.00	3.32	0.50	2.8		31.0
11	Oval	14.8 thick	6.15	48.1	14.96	15.00	42.60	17.50	2.66	0.50	2.2		42.0
12	Round	22 x22 prefect round	9.75	22.11	22.24			23.90	2.74	0.50	2.2		23.0
13	plain	9.8 X 32.5	0	32.5	9.91	10.45	32.00		9.91	0.20		9.7	26.0
14	edging	12.3 X 24.5	10	12.1	24.77	12.20	24.55		4.77	0.20		4.6	12.0
15	Dogbone	10.8 X 28	4.5	29.6	10.92	11.30	28.10		1.92	0.20		1.7	28x20,27x18,26x18
16	Slitting	10.5 X 30	4.9	31.56	10.62				0.82	0.20		0.6	34x18,34x18,32.3x16
17	oval	5.6X12	2.05	14	5.66	5.70	12.40		1.56	0.20		1.4	14x20
18	Rebar core	7.7	3	7.4	7.78				1.78	0.20		1.6	8.8x18

Notes (1) Frequency of intermediate sample cutting: #12: every one hour, #6: two times in shift, #13,14 & 15 : once in four hours.
(2) Copy distribution : Roll Shop, Stand Assembly shop, Guide shop, Production
(3) For dogbone and slitting pass, check also the roll gap at "neck" 22.242

Standard prepared by: ANT

7.12
FALSE ROUND SETTING



7.12
SAMPLE CHECKING

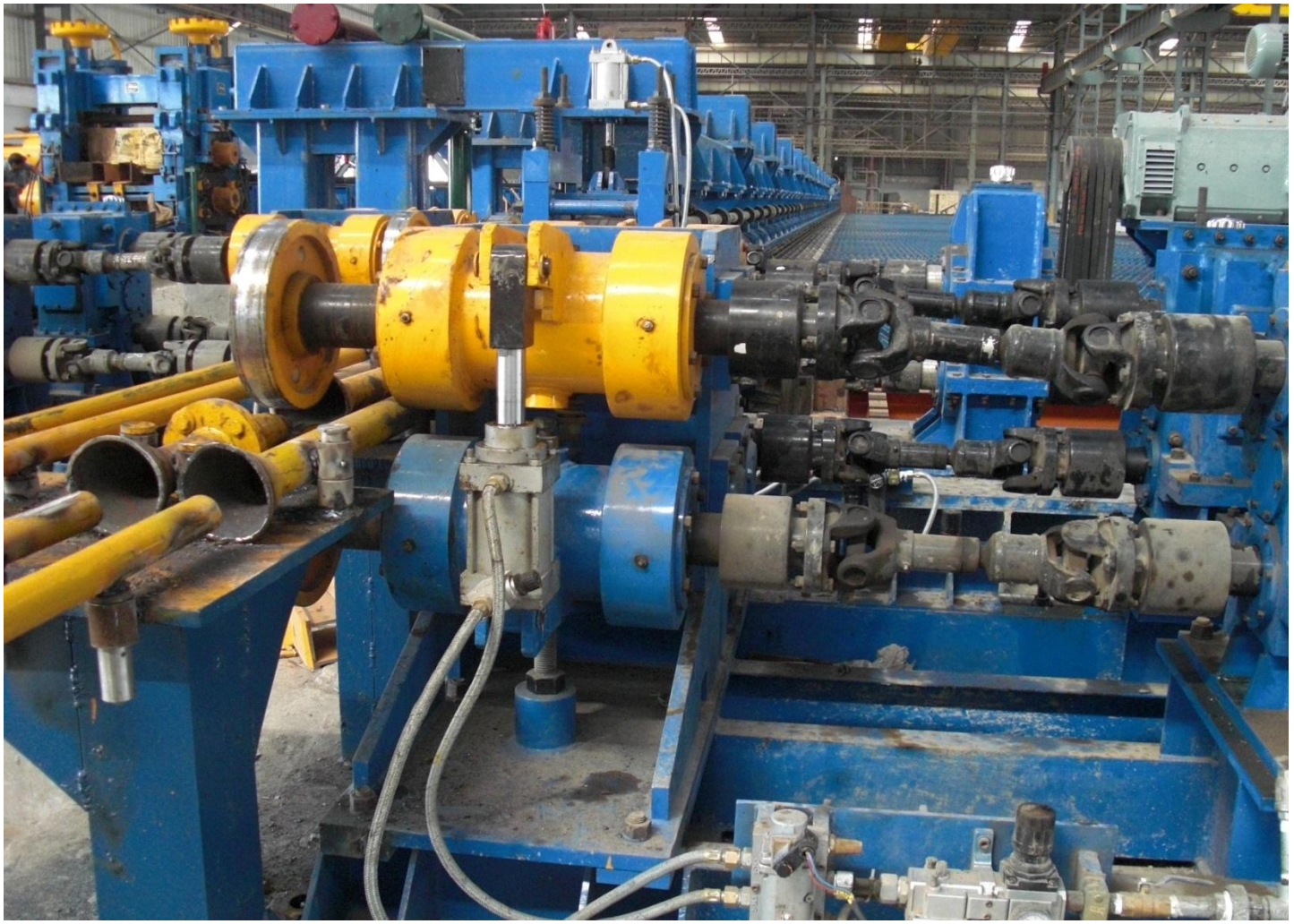
7.12 SAMPLES

Crop end after seventh pass

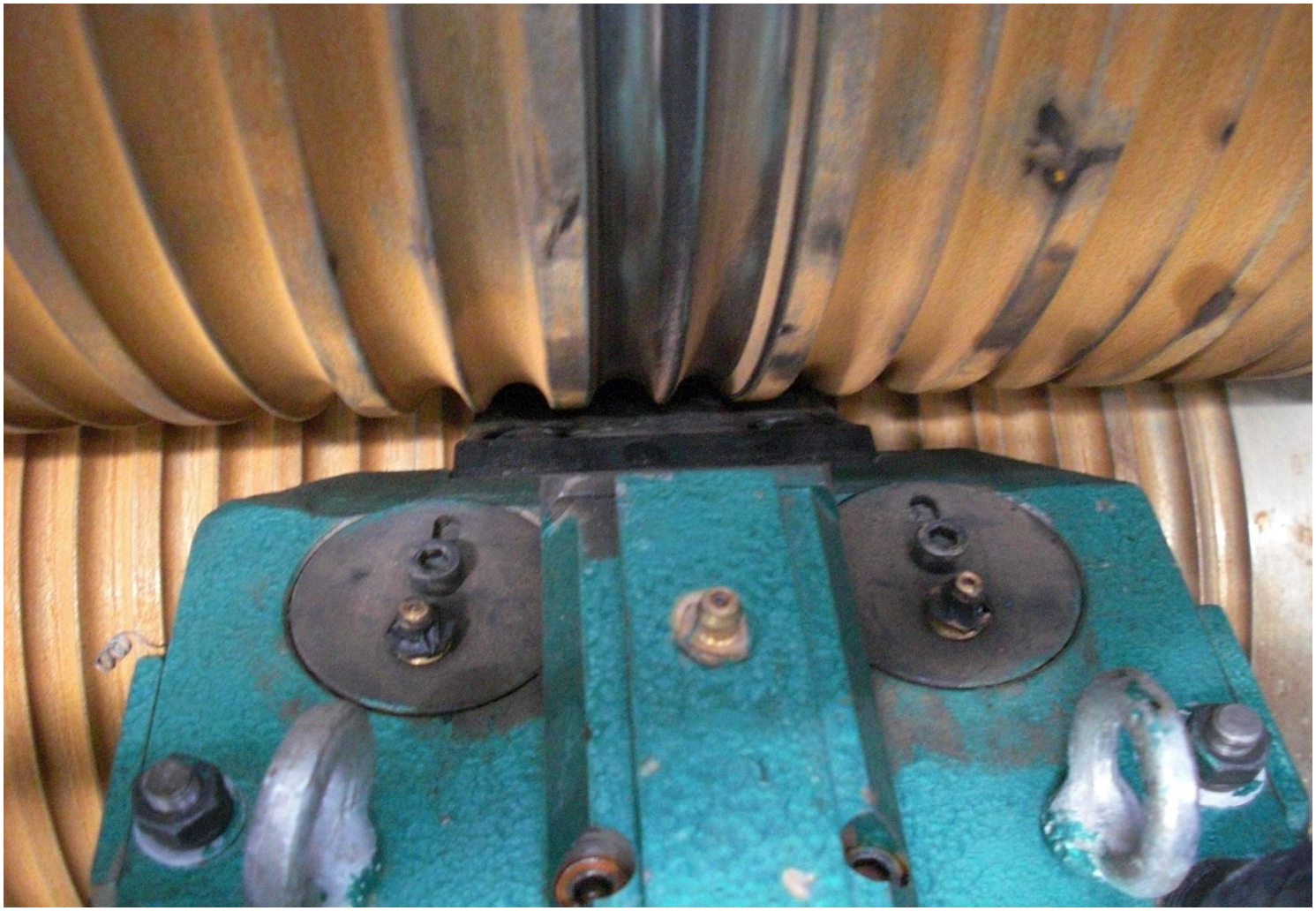
Crop end after seventh pass rarely split

7.13
CHECK TIGHTNESS

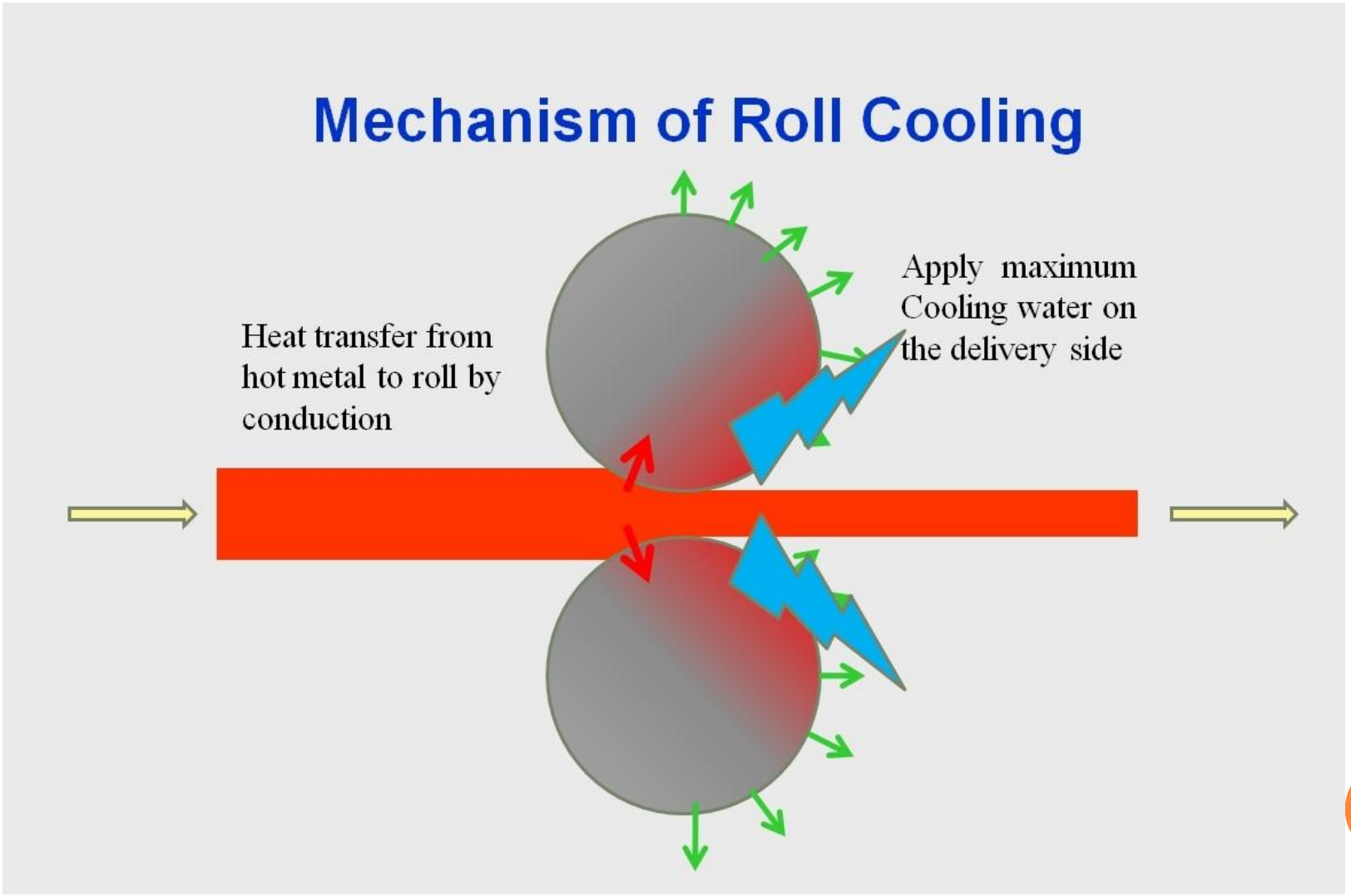
7.16
BREAKING PINCH ROLLS



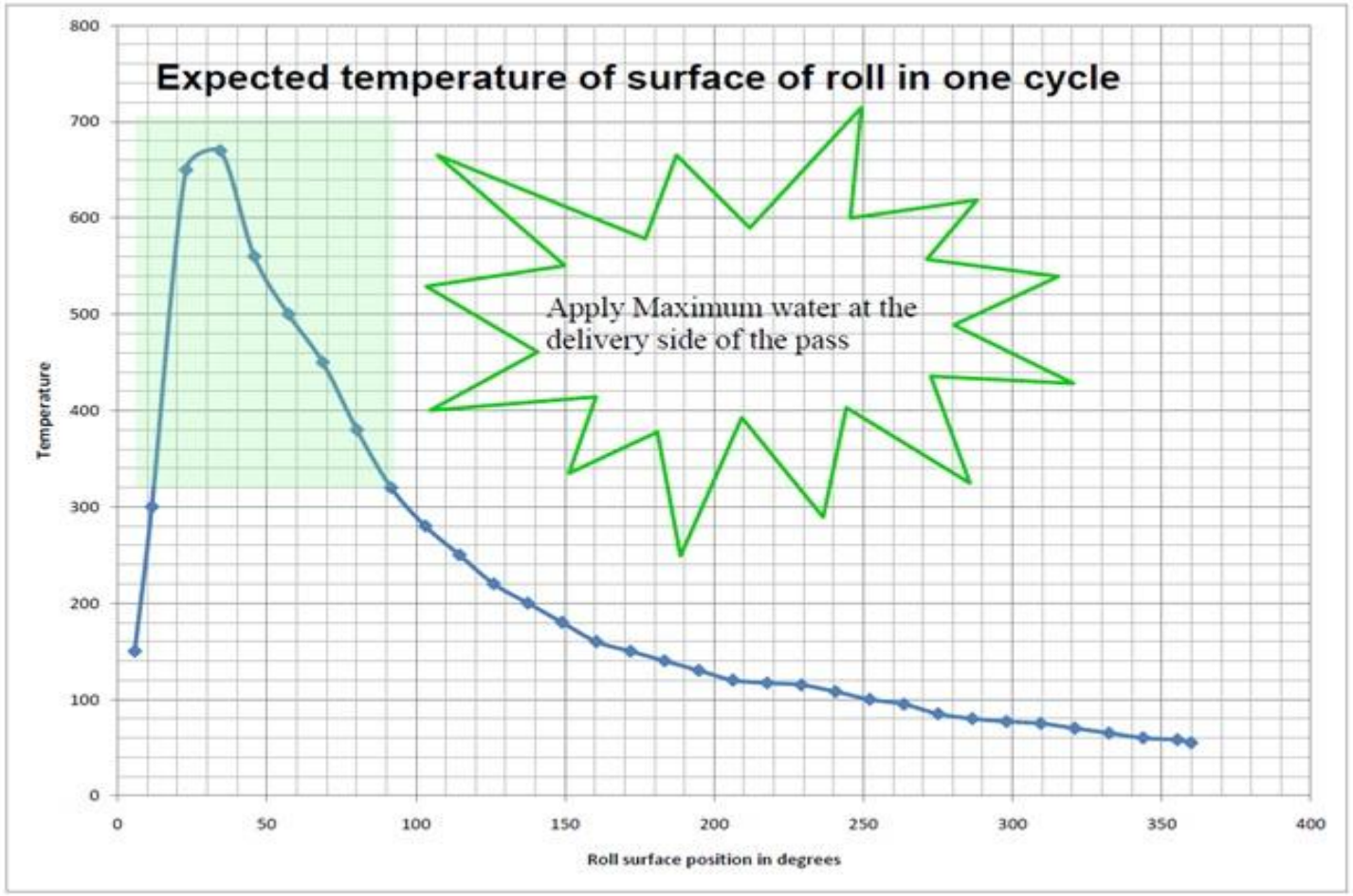
7.17
SLITTER ROLL



7.18
ROLL COOLING



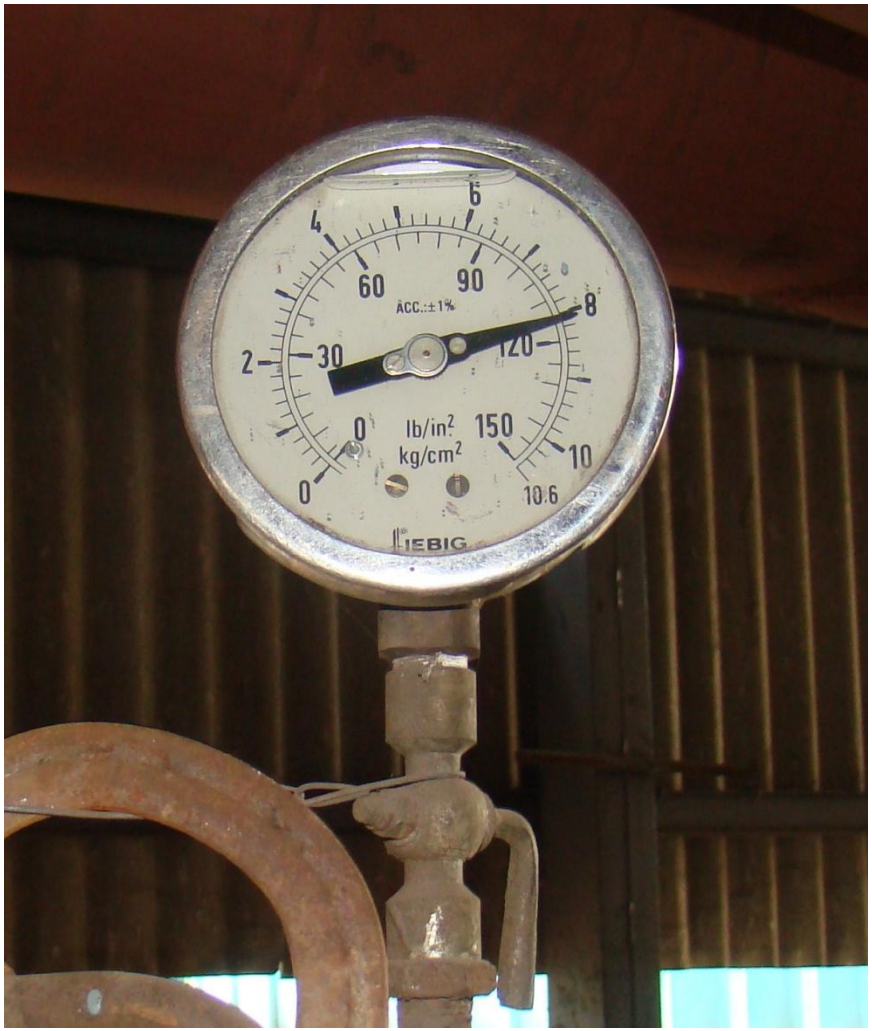
7.18
ROLL COOLING



7.18
ROLL COOLING FOR 3 HI

7.18
ROLL COOLING

7.18
PRESSURE GAUGES



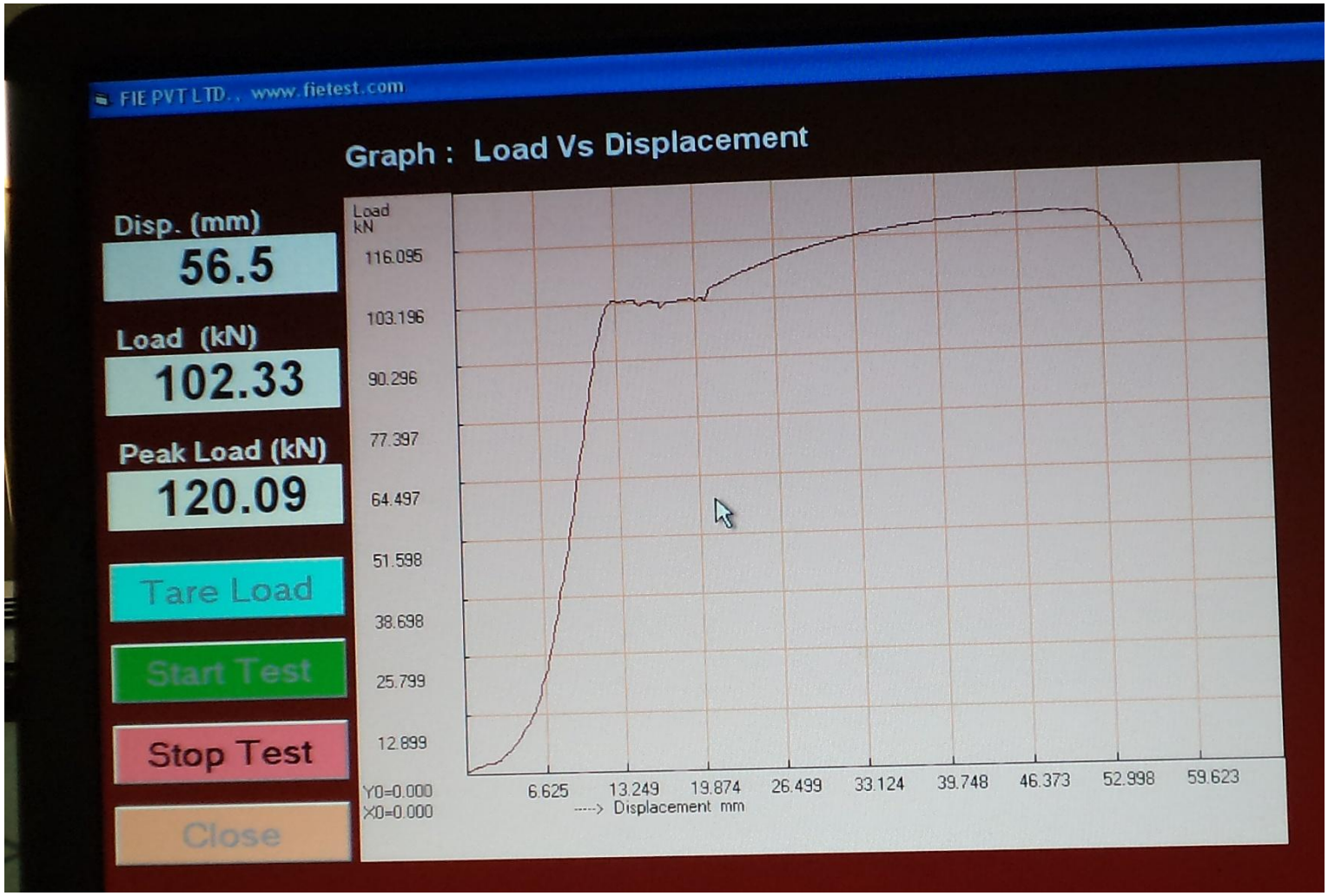
7.18
Roll Cooling Water pressure

7.18
Pressure Gauge at header

7.19
SLITTER DELIVERY GUIDE

7.19
SLITTER DELIVERY BOX

8.2.D
LOAD VS DISPLACEMENT



8.5
UNIVERSAL TESTING MACHINE CALIBRATION

8.5 UTS

8.8
BAD STORAGE

8.8.
FINISHED GOOD STACKING

8.8
BUNDLE STACKING

8.9
BILLET RHOMBIDITY

8.9
CHECK BILLET CHEMISTRY

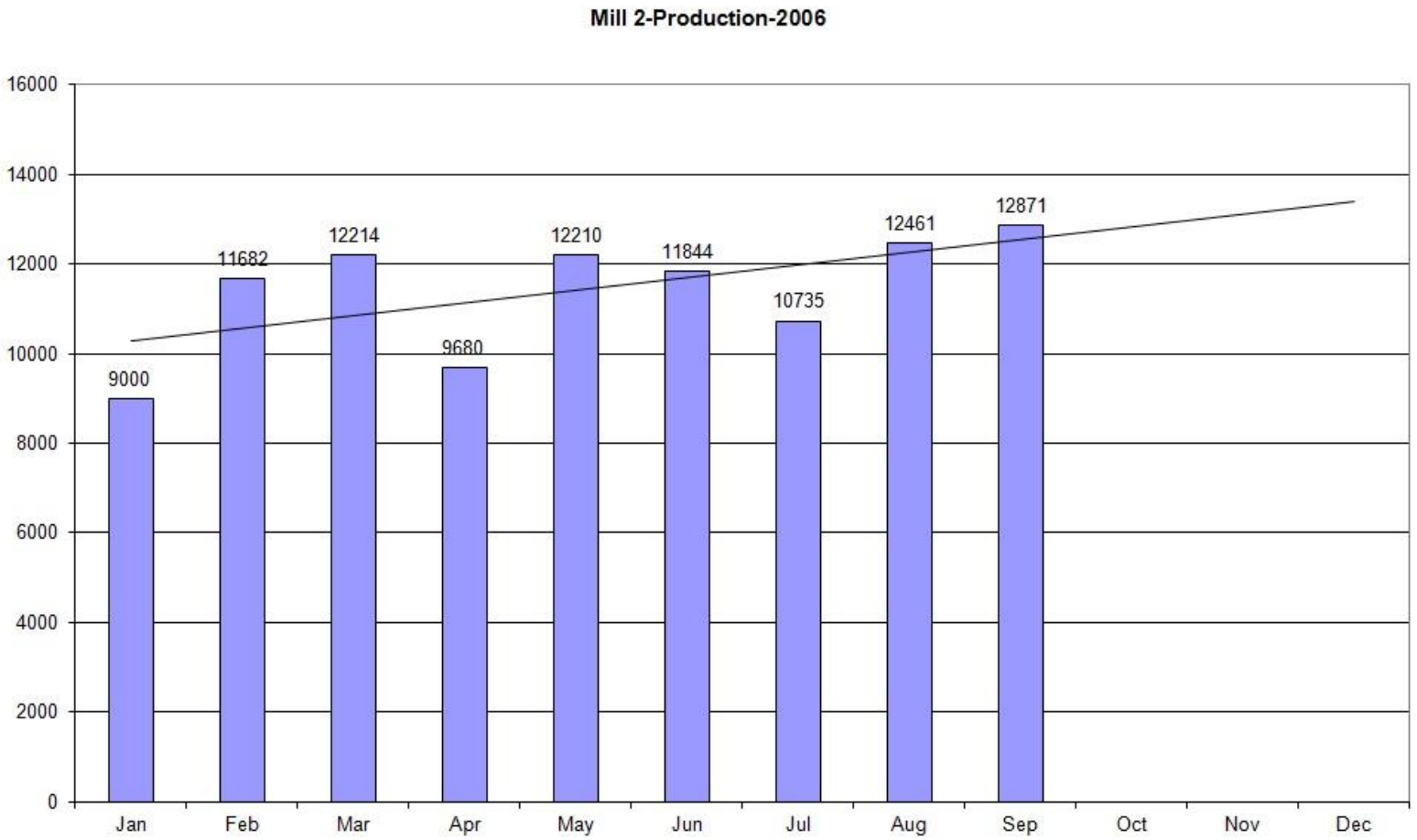
10. CALIBRATION

10.4. CALIBRATION INSTRUMENT

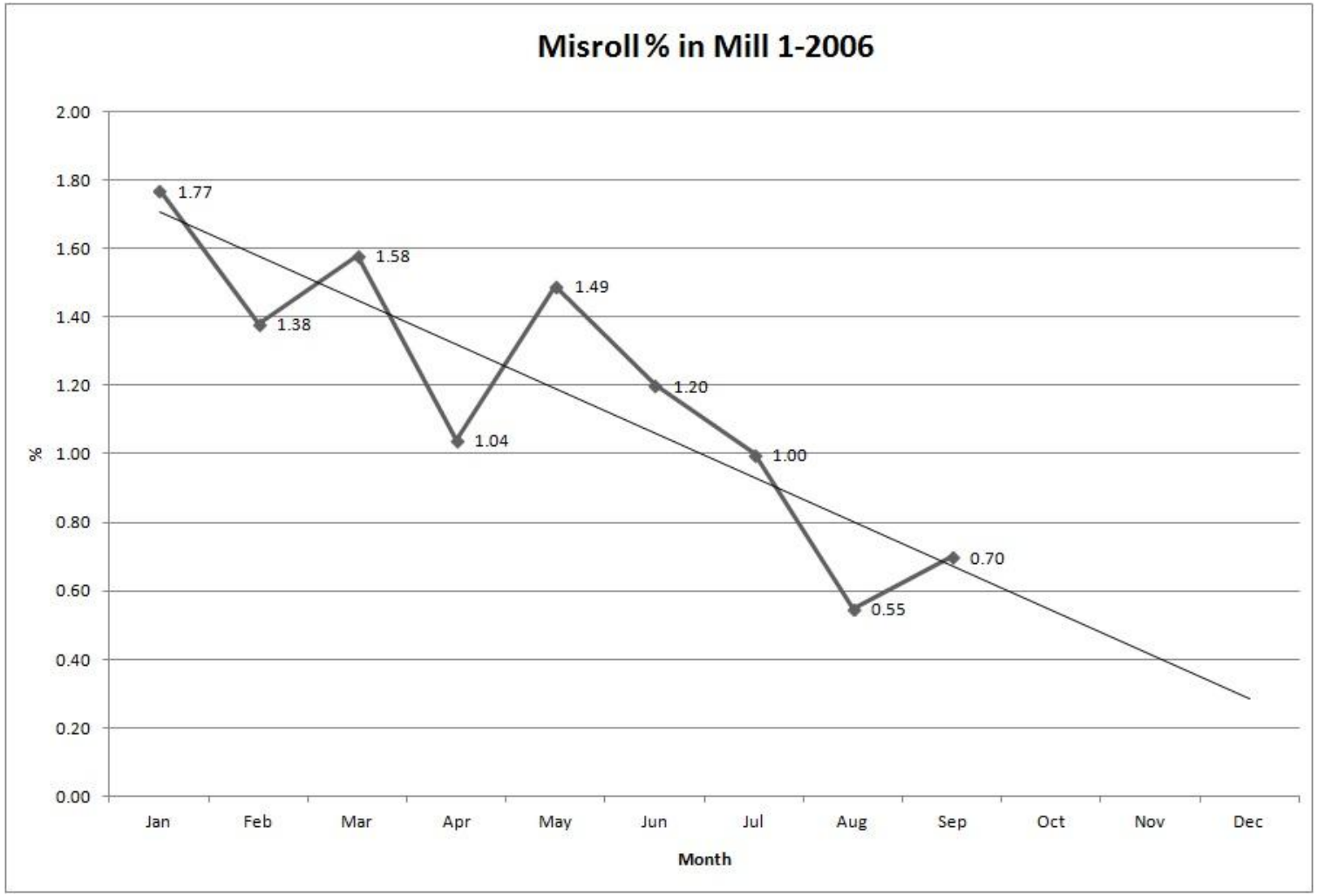
11.4.A.
BEARING FAILURES

11.8
WASHING BOOTH

13.1 PRODUCTION



13.2
Monthly Misroll percentage



14.1
INHOUSE TRAINING

14.1
TRAINING CLASS

14.2
TRAINING CLASS


Thank You